REPORT RESUMES

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THE PREDICTIVE ASSESSMENT OF THE ADULT RETARDED FOR SOCIAL AND VOCATIONAL ADJUSTMENT, A REVIEW OF RESEARCH. PART 1, ANNOTATED BIBLIOGRAPHY.

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DESCRIPTORS- *MENTALLY HANDICAPPED, *ANNOTATED BIBLIOGRAPHIES, *VOCATIONAL ADJUSTMENT, *SOCIAL ADJUSTMENT, *PREDICTIVE MEASUREMENT, ADULT PROGRAMS, ADULTS, ADULT VOCATIONAL EDUCATION, EMPLOYMENT PROBLEMS, RESEARCH, SHELTERED WORKSHOPS, VOCATIONAL REHABILITATION,

THIS ANNOTATED BIBLIOGRAPHY CONTAINS REFERENCES PERTINENT TO THE PROBLEMS OF PREDICTIVE ASSESSMENT OF VOCATIONAL AND SOCIAL ADJUSTMENT IN THE ADULT RETARDED. THE SEVEN AREAS COVERED ARE--(1) GENERAL STUDIES, REPORTS, BOOKS, AND ARTICLES, (2) DESCRIPTIVE STUDIES TO 1945, (3) DESCRIPTIVE STUDIES AFTER 1945, (4) PERSONAL VARIABLES, (5) ENVIRONMENTAL VARIABLES, (6) PREDICTIVE STUDIES, AND (7) TRENDS IN TRAINING. THE 532 REFERENCES DATE FROM 1912 TO 1966 AND INCLUDE AVAILABLE FOREIGN MATERIALS. THE APPENDIX LISTS 94 PROGRAM SUMMARIES AND REPORTS. AN AUTHOR INDEX IS INCLUDED (NOT ANNOTATED). (JZ)

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THE PREDICTIVE ASSESSMENT OF THE ADULT RETARDED FOR SOCIAL AND VOCATIONAL ADJUSTMENT

A Review of Research

PART I
ANNOTATED BIBLIOGRAPHY

A Research-Demonstration Project RD-1624-P
of the
Vocational Rehabilitation Administration
Department of Health, Education and Welfare
Washington, D. C.

Department of Psychology
The University of South Dakota
Vermillion, South Dakota
1966

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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PREFACE

The work reported in this and the accompanying monograph was supported by a grant from the Vocational Rehabilitation Administration, RD-1624-P. It was assigned originally to Teachers College, Columbia University while the Director was serving as Visiting Professor of Education at that institution in 1964-1965. Subsequently, the project was transferred to the University of South Dakota where it was brought to completion.

Part I of the report constitutes an Annotated Bibliography of references pertinent to the problem of predictive assessment of the adult retarded for vocational and social adjustment. In delimiting the subject-matter, certain decisions had to be made. Studies of children were included only where a predictive implication for adult status was involved. Materials relative to adult retarded were excluded if there was no clear reference to status or determinants of status. Purely programmatic descrptions of treatment and training which yielded no information on the predictive basis or follow-up outcomes of such programs were usually excluded, except that a listing of a number of program reports is given in an Appendix. These reports were obtained in response to a mail questionnaire sent to all training workshops in the United States. The list is probably far from complete, but was included because these materials are often obscure and difficult to obtain.

The Bibliography attempts, within its stated limits, to be as complete as possible. All available sources were searched but the Project Staff will be surprised indeed if there have been no significant omissions. Certainly there must be valuable foreign materials that have not come to our attention.

PROJECT STAFF

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Table of Contents

Preface		i
Project Staff		ii
Table of Contents		iii
Section I	General	1
Section II	Descriptive Studies to 1945	19
Section III	Descriptive Studies after 1945	37
Section IV	Personal Variables	63
Section V	Environmental Variables	95
Section VI	Predictive Studies	113
Section VII	Trends in Training	131
Appendix	Miscellaneous Program Summaries and Reports	147
Index of Authors		155

I. GENERAL

Adamson, William C. Diagnosis and evaluation: a lifetime process. 1961 Conference on Psychological Services in the Habilitation of the Mentally Retarded. The Training School at Vineland, N.J. Sept. 25-26, 1961.

The thesis of this presentation was that the diagnostic process, like the biologic growth process, must take place over the entire lifetime of the individual. Such a diagnostic process must integrate the best ideas of the past(e.g. the Classic Baseline Evaluation) the emerging ideas of the present (e.g. re-emphasis on the neurophysiologic and neuropsychologic points of view) and the political and philosophical convictions of our culture(e.g. Principles in Rehabilitation) into a far sighted commitment of human energy and ingenuity to new programs in the future(e.g. Lifetime, Child-Family-Community Planning Service).

Barr, M.W. Mental Defectives: The History, Treatment and Training. P. Blakistons' Sons and Co., Phila., 1904.

An early study of general factors in mental deficiency, including the treatment and training of illustrative cases. An interesting mixture of now outmoded concepts of etiology and classification with very advanced notions of treatment and rehabilitation, the book is well worth reviewing for its progressive insights.

Blackman, Leonard S. Towards the concept of a 'just noticeable difference' in I.Q. remediation. Amer. J. Ment. Def., 1957, 62, 322-325.

This study is concerned with the improvement of intellectual capacity as measured by an I.Q. score in mentally retarded children. It is proposed that research be initiated to establish the unit of "just noticeable difference" in I.Q. shift. One unit of JND in relation to perceived differences in the behavior of the child may be defined as a reliable shift from one point on a behavioral continuum to the next point. For example, one behavioral continuum may be concerned with comprehension, this continuum being divided into five discrete points: extremely good comprehension, moderately good, average, poor, or barely able to comprehend at all. The intent underlying the proposed establishment of what are essentially behavior norms for different I.Q. levels is to enable the researcher to interpret the I.Q. differences he obtains. In failure of the researcher to make this interpretation, interested consumers have no criterion for judging whether a reported difference in psychometric intelligence represents a real difference in functional change.

Bovet, L. Psychiatric Aspects of Juvenile Delinquency. World Health Organization. 1951.

A discussion of the etiology, treatment and sociological factors involved in juvenile delinquency. It is easier for the mentally retarded to become victims of unfavorable social and psychological circumstances because of his instability and suggestibility.

Burdett, A.D. An examination of selected prevocational techniques utilized in programs for the mentally retarded. Ment. Retard., 1963, 1, 230-237.

A discussion of prevocational evaluation emphasizing work sample method which 1) involves the same skills, aptitudes and abilities found in competitive industry; 2) is highly correlated with criterion tasks and so is valid measure of ability to do the tasks and reveals aspects of individual personality, interest, motivation and attitude toward work; 3) utilizes the sheltered workshop which gives information on individual capability to become a productive worker and also an indication of his actual skills, and 4) can be related to psychological tests which enables comparison of individuals with other workers, allows for measuring the growth of individual capacities if retrained and may suggest in the beginning whether the attempt is feasible.

Burr, Emily T. The role of individual differences in vocational placement of the mentally retarded. Bulletin: Rehabilitation Review, Nov. 1956.

The basic principles of vocational guidance of the mentally retarded are no different than those of all vocational guidance. Although there have been developed some special techniques and cautions to cope with the generally greater limitations of the mentally retarded, it can not be emphasized too strongly that these should not be used in contra-distinction to the primary principle of all guidance - recognition of individual differences and the right of the individual to self-determination.

Cate, H. and Gegenheimer, R. The community supervisor looks at parole. Amer. J. Ment. Def., 1950, 55, 275-278.

General discussion of placement in a hospital as "housemen" of boys from Fernald State School, Waverly, Mass.

Clarke, A.D.B. A Symposium: the social adjustment of the mentally deficient. 1. Recent English Research. Amer. J. Ment. Def., 1957, 62, 295-299.

British research on adjustment of imbeciles, shows that mental defectives above the level of idiocy can make some social adaptation. Learning of imbeciles: 1) initial level on any test seems to be poor, 2) initial level predicts poorly if at all the ultimate ability after training, and 3) main distinction between imbeciles and normal performance on simple skills is time taken to attain the level.

Clarke, A.D.B. and Clarke, A.M. A rehabilitation program for certified mental defectives. Mental Health, London, 1954, 14, 4-10.

Description of a British training program and placement policy, with case histories of mentally defective men returned to the community. Factory work is found the most satisfactory and the future outlook for the mentally retarded is good especially under conditions of full employment.

Clarke, Mary Jane Ihle. A community placement program for the mentally retarded. Amer. J. Ment. Def., 1959, 64, 548-555.

A discussion of the factors involved in placing institutionalized mentally retarded in the community. Placement was made on the basis of job availability, adjustment in institution, length of time in institution, and the degree of supervision required.

Cowen, Emory L. Personality, motivation and clinical phenomena. In: Lofquist, L.H. (ed.) Psychological Research and Rehabilitation. 1960, Miami Beach, Florida. 112-171

Summary of the work group on Personality, Motivation and Clinical Phenomena at the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. The personality psychologist might be useful in accelerating study of the psychological aspects of disability and rehabilitation in two ways: a) by placing his wisdom, experience and knowledge at the disposal of the professional rehabilitation specialist who is faced with the practical problems in the area of motivation and personality, and b) by application of personality theory and research to the direct study of disability and rehabilitation. The present need in psychotherapy research is to select approaches. techniques, and methods which show promise of ready translation and usefulness in illuminating the understanding of the process of rehabilitation.

Daviss, S.P. Social Control of the Feebleminded. Ph.D. Dissert., 1923.

A study of the social control of the feebleminded functioning as members of society. They may be safely and profitably retained in society provided there is sufficient control of them until they can exercise self control.

Davies, S.P. and Ecob, K.G. *The Mentally Retarded in Society*. New York, Columbia University Press, 1959.

A review of the historical background of modern attitudes towards mental retardation and treatment with a description of some of the current trends in rehabilitation programs for the retarded.

Deardon, H.M. The efforts of residential institutions to meet the problems of job finding and employment. *Amer. J. Ment. Def.*, 1951, *56*, 295-307.

General discussion of the problems involved in finding jobs for institutionalized mental deficients and the responsibilities of the social worker and institution after the individuals have been placed.

Deprospo, C. et al. Vocational implications for the mentally retarded. *Occup. Educ.*, 1946, *3*, 171-176.

A discussion of good job placement; attributes necessary for good vocational adjustment; traits that make good vocational adjustment difficult, when dealing with the mentally retarded.

Deprospo, C., Rosenzweig, L.E. and Shainman, L. A follow-up program for the mentally retarded. *Amer. J. Ment. Def.*, 1948, *53*, 353-362.

A general study of a vocational training program for mentally retarded including suggestions for guidance, placement and follow-up services.

DiMichael, S.G. Employment of the mentally retarded. *J. of Rehabilitation.*, 1949, *15*, 3-7.

A review of some misconceptions which in the past made rehabilitation of the mentally retarded difficult, along with some suggestions for future improvement.

DiMichael, S.G. Vocational diagnosis and counseling of the retarded in sheltered workshops. *Amer. J. Ment. Def.*, 1960, *64*, 652-657.

A discussion of the development of community workshops and how testing procedures of the past were inadequate for prediction. It was suggested that a carefully selected, constructed and evaluated battery of work samples be developed and standardized to tap different abilities of the mentally retarded; or already standardized tests of manual ability should have norms established for people with lower mental abilities. Group counseling is now being carried out fruitfully and economically with the mentally retarded along with individual counseling where needed.

DiMichael, S.G. Vocational rehabilitation of the mentally retarded. Personnel and Guidance Jour., 1953, 31, 428-432.

General discussion of Federal programs for rehabilitation of mentally retarded. Emphasizes need to make adequate assessment of potentiality in broader terms than I.Q.

Doll, Edgar A. Social adjustment of the mentally sub-normal. J. of Educ. Research., 1934, 28, 36-42.

Discussion of problems of social adjustment of mentally retarded and their alleviation through adequate school instruction, systematic occupational adjustment and sympathetic social supervision. Emphasizes importance of continuity of training throughout.

Dubrow, M. Sheltered workshops for the mentally retarded as an educational and vocational experience. Personnel Guid. J., 1960, 38, 392-395.

Discussion of factors that have implications for the vocational rehabilitation of the mentally retarded. Factors thought to be pertinent were: personality characteristics, type of competitive employment situation, attitude toward employment, an individualized workshop atmosphere, evaluation tests of work samples, efficiency of group counseling, counseling with parents, and social activities. Factors which did not differentiate success from failure groups, using competitive employment as a criterion, included: I.Q., reading level, friendlessness, and adequate knowledge of job culture. The data on which these findings were based are not reported in this article.

Dybwad, G. Challenges in Mental Retardation. New York, Columbia University Press, 1964.

Collected papers on various aspects of mental retardation with emphasis on public policy, services and planning. Chapter 13: Rehabilitation for the adult retardate, and 16: Income and social services for the mentally retarded are relevant to the problem of predictive assessment.(see separate listing).

Dybwad, Gunnar. Employment problems of the mentally retarded. In: Employment Problems of the Mentally Handicapped: A Group Discussion. President's Committee on Employment of the Handicapped, Washington, D.C., 1962.

After explaining the purposes of the transitional and long term workshops, the following problems of employment of the mentally retarded are listed: 1) the cost of training and education programs which make it possible for the retarded to prepare themselves for employment; 2) the employer's fear of the risk involved, especially fear of accidents; 3) the public attitude that the mentally retarded is a child, not an adult; 4) physical appearance rather than ability; 5) the problem of labeling people by classifications and intelligence quotients; 6) the need for sheltered housing for some retarded who are successfully employed but who still need some assistance in counseling and guidance during leisure hours in order to maintain employment.

Engel, Anna M. Employment of the mentally retarded. Amer. J. Ment. Def. 1952, 57, 243-267.

A review of a number of follow-up studies and criteria for job placement of the mentally retarded.

England, George W. Differential psychology and rehabilitation. In: Lofquist, L.H. (ed.) Psychological Research and Rehabilitation. 1960, Miami Beach, Florida, 52-67.

Summary of the proceedings of the work group on differential psychology and rehabilitation at the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. Despite the complexity of individuality, investigations in this area tend to concentrate on relatively few variables within a single scientific discipline at any one time. It was suggested that diverse findings in studies of individuality could be integrated through the longitudinal study of large numbers of individuals from birth to death by investigators from a wide variety of scientific disciplines. The study of individuality at any life stage should include analysis of: 1) the nature of the limits within which development is occurring; 2) the individual's selection process; 3) the learning process within the limits of the individual's developmental channels; 4) revision of limits based on circumstances of development and not the relatively permanent characteristics of the individual which do not seem subject to change.

Fraenkel, W.A. The Mentally Retarded and Their Vocational Rehabilitation--A Resource Handbook. New York, N.Y., Nat. Assn. for Retard. Child., 1961.

Following an introductory chapter explaining mental retardation and its various aspects, this book is concerned with the vocational rehabilitation agency and its procedures, the range of vocational rehabilitation resources, special service needs, selective placement and follow-up. Attention is given to vocational and personal adjustment training.

Garrett, J.F. Occupational adjustment. Proc. Conf. Child. Res. Clin., Woods Schools, 1955, 68-74.

A general discussion of personal and community factors and their relationship to occupational adjustment.

Garrison, I.K. Adjustment potentiality. Amer. J. Ment. Def., 1951, 56, 132-144.

A review of the literature dealing with adjustment(mostly with normal Ss). Care should be taken in generalizing from single cases to groups; individuals should not be treated as representative prototypes; adjustment is in part a function of experience of success and failure.

Gibson, Robert. The return of the defective to the community. Canadian Med. Assn. Jour., 1957, 77, 598-600.

General discussion of factors governing the return of the mentally defective to the community, including employment opportunities, community attitudes, organization for follow-up and support.

Goldstein, Herbert. Social aspects of mental deficiency. Diss. Abstr. 17, 2525-2526.

A discussion of how technological development causes social changes and how this requires all workers in the area of mental deficiency to accept one dynamic concept of mental deficiency. The concept offered is that mental deficiency is a status assigned to persons who cannot fulfill social roles because of mental subnormality. This concept allows for changes in behavioral values arising from changes in society since it does not establish limits without taking into account the dynamics behind the limits.

Goldstein, Herbert. Social and occupational adjustments. In: Stevens and Heber, (eds) Mental Retardation: A Review of Research. Chicago: The University of Chicago Press, 1964, 214-258.

A major review of literature on social and occupational adjustments of the retarded with main emphasis on earlier materials. Topics: early concepts of adjustment potential of mentally retarded persons; the adjustment of the mentally retarded in the community; vocational status of mentally retarded persons; the occupational outlook.

Goodwill Industries of America. Work Evaluation and Employment Preparation Services for the Mentally Retarded, Washington, D. C., 1961

Papers listed separately in appropriate sections below.

Gunzburg, H.C. Vocational and social rehabilitation of the feeble-minded. In: Clarke, A.M. and Clarke, A.D.B. Mental Deficiency - The Changing Outlook. Glencoe, Ill. The Free Press, 1958, 334-364.

Generally feeble-minded individuals admitted to an institution are socially and emotionally maladjusted. The hospital's task is to rehabilitate the individual and return him to the community. For many of these patients special therapy is not required; what they need is social and vocational training. If this training is provided they can make a satisfactory community adjustment. There is no evidence to support any particular approach to training since much of the evidence gathered from past reports and research is outdated and invalid. Not only have the methods changed but also the attitudes of the public toward the mentally defective.

Hoyle, J. Employment and occupation of the mentally handicapped. Amer. J. Ment. Def., 1953, 57, 587-593.

A description of "occupation and industry centers" available for employment of the mentally retarded in England.

Huber, W.G. and Soforenko, A.Z. Factors contributing to the vocational success or non-success of the institutionalized retardate. Training school Bull., 1963, 60(1), 43-51.

A review of literature on how institutions make job placements. Shafter (1957) gathered 248 criteria of placement from 47 institutions. Like most of the other studies he also found that job placement is generally made on the "feel" of it and not by objective methods. The overall conclusion of the review is that more patients fail because of inability to deal with situations outside the routine of work rather than within. It appears that personality and attitudes are more important than specific job skills.

Jacobs, A., Weingold, J.T. and Dubrow, M. The Sheltered Workshop. A Community Rehabilitation Resource for the Mentally Retarded. N. Y. State Assoc. for Retarded Children, Inc., New York, N.Y., 1958.

The report of a summer workshop in vocational rehabilitation of the mentally retarded adolescent and adult conducted at Teachers' College, Columbia University. Emphasis was placed on the sheltered workshop as a community resource. The basic records suggested for admission to a Sheltered Workshop were: general medical report, special medical report if indicated, psychological evaluation, social history, school history and work history. The specific objectives of evaluation were defined as: 1) to identify the individual's specific assets and limitations; 2) to determine whether the individual can perform and the degree to which he can perform; 3) to formulate a vocational objective and a program of training to accomplish this objective. Work samples were considered to be of crucial importance as evaluative tests since such factors as approach to a new situation, perseverance, frustration tolerance, distractibility, fatigue and anxiety could be observed.

Kelley, H.H., Hastorf, A.H., Jones, E.E., Thibaut, J.W. and Usdane, W.M. Some implications of social psychological theory for research on the handicapped. In: Lofquist, L.H. (ed.) Psychological Research and Rehabilitation, 1960, Miami Beach, Florida, 172-204.

Summary of the work group on Social Psychology at the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. Topics discussed were the social psychological aspects of the handicapped person's view of himself and his perception of others' attitudes toward him and the normal person's conception of what is the appropriate helping relationship to maintain with handicapped persons.

Kern, Robert V. Pre-Vocational Skills Evaluation: An Aid in Habilitation Services for Mentally Retarded Youth. Detroit, Mich., 1962.

Operating as a diagnostic tool, pre-vocational skills evaluation can assist these least employable youth in attaining realistic vocational goals. The work samples approach is easily understood by the client. It also opens unknown employment opportunities to the client. Its simplicity lets the client analyze his own assets, or liabilities, temper his unrealistic goals, remove some of his fears of the unknown and reinforce his best capabilities. For many years pre-vocational evaluation has performed a valuable function in the rehabilitation of the physically handicapped and there is every reason to believe that it is contributory to the habilitation of the mentally retarded as well.

Kirman, Brian. Research and mental deficiency. Lancet, (London), 1957, 7007, 1221-1223.

A British review of research in the field of mental deficiency including potential of imbeciles for social and occupational adjustments.

Kratter, F.E. The rehabilitation and social integration of the mentally retarded trainee. In: Oster, J. (ed.) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

A short statement about society's and the individual community's roles in helping rehabilitate the mental retardate.

Lawrence, E.S. Social adjustment: an area for psychological research in mental deficiency. Amer. J. Ment. Def., 1954, 58, 500-505.

A review of past and present concepts of and attitudes toward the social adjustment of the retarded, with suggestions for present and future research.

Lofquist, Lloyd H. (ed.) Psychological Research and Rehabilitation. American Psychological Association Conference Report, Miami Beach, Florida, 1960.

A summary of the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. Each of five specific work group contributed a chapter to the text.

The summary included an enumeration of desirable prerequisites to facilitate a successful habilitation and placement program: 1) better physical evaluation; 2) better psychological evaluation; 3) a more realistic evaluation of retardates by teachers and parents; 4) maximum development in reading, writing, and verbal communication; 5) development in attention span; 6) development within the retardate of an adequate concept of himself as a person and as a productive worker; 7) training in acceptance and observance of rules; 8) training of memory habits; 9) training in proper use of simple articles connected with work; and 10) determination of what motivates a given retardate.

Magnifico, L.X. and Doll, E. A. Out of school and self-supporting. Overview, 1962, 3, 32-33.

A review of some studies concerning mentally retarded who had attended special classes; with particular reference to employment.

Meyerson, L., Michael, J.L., Mowrer, O.H., Osgood, C.E. and Staats, A.M. Learning, behavior and rehabilitation. In: Lofquist, L.H. (ed.) Psychological Research and Rehabilitation, 1960, Miami Beach, Florida, 68-111.

Summary of the work group on learning at the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. The problems of rehabilitation were conceptualized in two major theoretical ways: a) as a trifold overlapping of habilitation(original learning), dishabilitation(modifications of behavior resulting from the condition of disability), and rehabilitation (the new learning, unlearning, and relearning which lead to adjustment); and b) as maintaining behavior, and extinguishing behavior. The first set of concepts was considered within a multi-stage general theory of behavior with particular emphasis on the encoding-decoding and instrumental acts--significance processes. The second set of concepts was considered within a single-stage S-R framework with special emphasis on the principle underlying reinforcement, extinction, discrimination, generalization, and counter-conditioning of incompatible behavior. It was agreed that a combination of behavior theory background and practical experience in rehabilitation was required for creative rehabilitation learning research.

Mursell, George R. A job analysis form for institutional jobs. Amer. J. Ment. Def., 1953, 57, 585-586.

A device for relating the work potential and characteristics of institutional retarded to the characteristics and requirements of jobs in the institutional setting.

NARC and Vocational Rehabilitation Administration, U.S. Dept. of Health, Education and Welfare. Rehabilitation and Research in Retardation--Report and Recommendations. Dallas, Texas, Southern Methodist University, 1960.

Summary of a conference on research and demonstration in the rehabilitation of the mentally retarded. The aims of the general sessions and workshops were: 1) orientation in the general field of vocational rehabilitation as it relates to the mentally retarded; 2) improvement in operating methods of occupational centers; 3) identification of significant developments in new or improved methods and techniques which may have general value; 4) exploration of the areas requiring additional research and demonstration in mental retardation; 5) examinations of the place and value of research as a part of a service program; 6) dissemination of findings and recommendations of the conference to participants and others in the field, and to agencies and organizations contemplating vocational rehabilitation programs for the mentally retarded.

O'Connor, N. The successful employment of the mentally handicapped. In: Hillard and Kirman (eds.) Mental Deficiency, London: Churchill Ltd., 1957, 448-480.

A review of the literature giving a history of concepts regarding the rehabilitation of the mentally retarded. The modern concept of level performance is understood to depend not only on intelligence but also on persistence, stability and prior practice. The aims of vocational training should be to teach the mentally retarded simpler tasks rather than complex skills. Reasons for failure include inadequate training for outside work as contrasted with work in hospital, poor supervision, incorrect placement, lack of insight of supervisors.

Oster, J. and Sletved, H.V. (eds.) International Copenhagen Congress on the Scientific Study of Mental Retardation. 2 vols., Copenhagen, Denmark, 1964.

The 159 papers presented at the Congress include the following topics among others: Social Adjustment, Integration, and Vocational Rehabilitation.

See especially papers by Barclay, Gunzburg, Kratter, Merlet, Pereira, Pinkard, Rasmussen, Seidenfeld, Tizard, and Wehrmeijer.

Pereira, O. Experience in vocational rehabilitation with mentally retarded young adults. In: Oster, J. (ed.) International Copenhagen Congress of the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

Observations and conclusions developed during 18 years of work done at the Pedagogical Workshops of Socienada Pestalozzi do Brasil. The plan of vocational rehabilitation is the case study, training, follow-up, and counseling for those leaving the Workshop. Essential objectives are therapy and training. Reports on the program form part of a research being developed under the name of "natural experimentation method." Conclusions drawn are under the headings of psychological effects, effects of a social nature, and effects of an occupational nature.

President's Committee on Employment of the Handicapped. Employment of the Mentally Handicapped: A Group Discussion, Washington, D.C., 1962.

This discussion on employment of the handicapped contains material concerning both mentally retarded and mentally ill. Of special importance is Gunnar Dybwad's "Employment problems of the mentally retarded."(see separate listing above.)

Raymond, G.S. Industrial possibilities of the feebleminded. Industrial Psychology, 1927, II, 473-478.

An early study of the personal and environmental factors enabling the retarded to be successful in industry. Lists occupations open, with minimal intelligence requirements.

Rockower, Leona D.W. A study of the use of sheltered workshops as an occupational training resource. Amer. J. Ment. Def., 1953 57, 425-433.

A general discussion of the functions and operations of sheltered workshops, with emphasis on their value in appraising vocational potential.

Rosenzweig, L.E. The habilitation of the mentally retarded. Amer. J. Ment. Def., 1954, 59, 26-31.

An insightful general discussion of habilitation(early planning and continuous programing) as distant from rehabilitation(late attempts to retrain). The former requires identifying barriers to self-actualization, and exploration of protective influence. Steps: early diagnosis and prognosis, early training, realistic schooling, imaginative protection, public enlightenment.

Rossy, C.S. Feeblemindedness in industrial relations. Mental Hygiene, 1918, 11, 34-52.

An early study of factors influencing adjustment of the mentally retarded in industry. It is suggested that an investigation be made of personality factors to determine their effects on adjustment. Mentally retarded individuals are employable, and care should be taken in placement to save expense to employer and to help the individual make a better adjustment. It is assumed that the best occupation for the feebleminded is farm work, but industrial possibilities should be developed.

Shafter, A.J. The vocational placement of institutionalized mental defectives in the United States. Amer. J. Ment. Def., 1954, 59, 279-307.

A review of procedures and selection criteria employed by residential institutions in placements on jobs in the community. Only 53 of 91 institutions responded usefully. Procedures reported were usually haphazard and unsystematic; criteria of selection were usually I.Q. and good behavior, not based on research or adequate social service.

Shontz, Franklin C. Cognitive processes, cognitive theories, and rehabilitation. In: Lofquist, L.H. (ed.) Psychological Research and Rehabilitation 1960, Miami Beach, Florida, 13-51.

A summary of the proceedings of the work group on cognition-perception at the 1960 Miami Conference on Research in the Psychological Aspects of Rehabilitation. Two main themes were followed. 1) The problem of intra-professional communication. 2) Specific issues and reseach in the area of cognition. Special emphasis was given to the Clarke University organismic-development sequence. Topics discussed in relation to the Clarke University research were: 1) motor activity of children with cerebral palsy; 2) cognitive aspects of intentional touch; 3) rate of cognitive functioning of the individual organism; 4) developmental aspects of brain damage in childhood; 5) silent cognitive organizations; and 6) cognition of the self-as-object.

Stull, Edward. Southbury classification plan. Amer. J. Ment. Def., 1959, 63, 1022-1027.

A report of the Southbury system of classifying residents to determine factors involved in personal adjustment, based on nine-point scales in three areas of physical, intellectual and emotional functioning. Validating data are not given.

Stull, Edward. The value of psychological test procedures in the evaluation and diagnosis of the mentally retarded. 1961 Conference on Psychological Services in the Habilitation of the Mentally Retarded. The Training School at Vineland, N.J., 1961.

Psychological tests have gone through the process of being analyzed, researched, applied, revised, analyzed, researched, and applied again. Out of this process have come various claims for specific strengths as well as for specific weaknesses. The lack of universal agreement simply reflects the level of the profession of psychology at this time. Of more importance is that the results of these analyses and applications are well-known, or can be known readily through a literature search. When proper application of these tests is made to the evaluation and classification of the mentally retarded, the author is not impressed with any particular strength or weakness except those which may be inherent in the specific tests themselves. The variations in strengths and weaknesses in test procedures for the mentally retarded may represent in large part the skills of the psychologist as opposed to the psychological technique.

Syden, M. Preparation for work: an aspect of the secondary school's curriculum for mentally retarded youth. Except. Child., 1962, 28, 325-332.

A discussion of the school's responsibility to take a socio-occupational approach in the education of the mentally retarded with the inclusion of work experience and an adequate program of counseling parents and students.

Tizard, J. Adult defectives and their employment. The Practical Application of Research and Experiment to the Mental Health Field. N.A.M.H. Conference, 1953.

A description of the then current situation in England with regard to the incidence of high-grade mental deficients and their potentialities for employment. Institutional training and placement procedures are very backward, a large number of patients who could make adequate community adjustment are being essentially incapacitated for independent living by the practices currently followed.

Tizard, J. Research in mental deficiency. Medical World. London, 1958, 89, 41-45.

A discussion of research needed in finding the causes for failure in community adjustment and the need for well-designed studies in care and training practices.

Tizard, J. and O'Connor, N. The employability of high-grade mental defectives I. Amer. J. Ment. Def., 1950, 54, 563-576.

A review of sociological and psychological studies dealing with the incidence and employability of the mentally retarded. The need for and the absence of adequate research on training and prognosis for employment is emphasized.

Tizard, J. and O'Connor, N. Occupational adaptation of high-grade mental defectives. Lancet, 1952, 2, 620-623.

The institutional training of high-grade mental defectives is often not related to work which devectives might be called upon to perform when sent on license, because institutional policy tends not toward returning defectives to the community, but toward segregating them. High-grade defectives trained for and employed on simple repetitive work can succeed when well supervised and adjusted to strange surroundings. The author stated that training and supervision are apparently more important than considerations of basic "psychological" quality, whether of abilities or personality traits. The main problem of occupational psychology is not selection, but training, motivation, and supervision

Trachtman, A. An exploratory program for the vocational adjustment of mentally handicapped adolescents. Amer. J. Ment. Def., 1954, 58, 424-430.

The purpose of this project was to determine the problems involved in providing vocational guidance and placement services through the school for educable mentally handicapped children. Vocational adjustment services were offered to 14 educable mentally handicapped children. In this class there were negro and white children from ages 14-17 years. The project lasted for two months during the summer of 1952. The interest of these children in vocational guidance and placement services was not maintained at a high level. There were obvious signs of lagging motivation and decreased participation by the youngsters in the project. It was felt that one of the most important factors in lack of interest shown is that mentally retarded children generally seek immediate goal satisfactions. Other contributing factors discussed were parental attitudes and influences, cultural biases against the mentally retarded, race prejudice and employer acceptance.

U.S. Dept. of Health, Education and Welfare. Casework Performance in Vocational Rehabilitation. 1959.

The Eleventh Annual Guidance, Training and Placement Workshop in 1958 developed an outline of the rehabilitation process in state vocational rehabilitation agencies, for determining standards of case service performance, and counselor training needs as a basis for a more effective staff developmental program. The following assets determine the vocational prognosis of the client: physical abilities, mental abilities, work history, economic stability, education and the relationship of such education to the field of vocational interest, personality and adjustment to social responsibilities, acceptance of disability in a society composed predominantly of nondisabled people, and social and moral responsibility or drives that determine success, ambition to progress, and outlook on life.

U.S. Dept. of Health, Education and Welfare. Preparation of Mentally Retarded Youth for Gainful Employment. Rehab. Series No. 507, Bull. No. 28, 1959.

The report of a conference held in Columbia, Ohio, in 1958 to discuss the preparation of the mentally retarded for gainful employment. The members of the conference agreed that preparing retarded youth for job placement should begin in the pre-school years at home and continue through school years. The school curriculum should be aimed toward providing information on adjustment, health, safety, personal grooming and family and community living. Throughout the school years the aid of a counselor is needed if the mentally retarded youth is to make an appropriate adjustment. Programs for vocational training should include: an evaluation before training, exploration of job opportunities, training, selective placement and continued follow-up by a counselor. A number of programs that illustrate the preparation of the mentally retarded youth for employment were presented.

Vocational Rehabilitation Administration. Special Problems in Vocational Rehabilitation of the Mentally Retarded. Madison, Wisconsin: Rehab. Service Series No. 65-16, 1963, U.S. Dept. of Health, Education and Welfare.

Guidelines for the rehabilitation counselor working with the mentally retarded. Some of the points stressed were: 1) care must be taken in evaluating a retarded individual for rehabilitation service to insure that appropriate service is given; 2) counseling of both client and family should be a continuous procedure varied to meet individual needs; 3) so little is really known concerning the best techniques of vocational preparation that procedures must be kept flexible, and supervisors inventive; and 4) follow-up counseling and assistance must be continued for as long as the retarded person shows any appreciable dependency on specialized services.

Wallin, J.E.W. New frontiers in the social perspective of the mentally retarded. Train. Sch. Bull., 1962, 59.

A historical review of attitudes toward and treatment of the mentally retarded including some summary information from recent follow-up studies.

Wallin, J.E.W. The psychological aspects of the problem of vocational preparation and rehabilitation of mentally and physically handicapped civilians. Amer. J. Ment. Def., 1945, 49, 290-299.

Discusses potential employment of handicapped in general and mentally retarded in particular as an outgrowth of their use as civilian employees during the manpower shortage of the war years. Adequate placement requires careful assessment based on genetic background, objective tests, work sample tests. The latter are regarded as most promising.

Warren, S.L. Focal Points in the Placement and Follow-up of the Mentally Retarded. Albany, N.Y., New York State Div. of Vocat. Rehab., Mimeograph copy, 1950.

A discussion of social factors involving both the retarded person and his family which are crucial in determining successful placement.

Warren, S.L. Problems in the placement and follow-up of the mentally retarded. Amer. J. Ment. Def., 1955, 59, 3, 408-412.

A discussion of the factors involved in successful placement of the mentally retarded. The factors were: parental attitudes, intrinsic shortcomings (readiness for work), physical concomitants, problems following placement, availability of jobs, and employer attitudes.

Woods Schools, Outlook for the Adult Retarded. Langhorne, Penn., 1960

Proceedings of a conference on the mentally retarded including papers on: aging and implications for mentally retarded; aid to the aging retarded and their families; New York State Employment Services experiences in the job placement of mentally retarded; and the changing population of mentally retarded.

Wright, M.E. Rehabilitation of the mentally retarded. Amer. J. Ment. Def., 1954, 58, 408-410.

A discussion of the need for adequate training of the mentally retarded child in order to minimize the handicaps in adult adjustment.

York, P.A. The paroled boy - working and home. Amer. J. Ment. Def., 1939, 44, 254-258.

Care of the mentally retarded should start in the home. Before an individual is labeled as being mentally retarded and committed to an institution he should be observed in different homes, industry, and on farms to see if it is possible for him to care for himself. This would avoid labeling individuals which results in their being looked down on for the rest of their lives, it would also keep institutions from being crowded with individuals who would not be there if the community had given them an equal chance.

II. DESCRIPTIVE STUDIES, TO 1945

Abel, T.M. A study of a group of subnormal girls successfully adjusted in industry and community. Amer. J. Ment. Def., 1940, 45, 66-72.

A study of the successful adjustment of 84 subnormal girls trained at the Woman's Trade School in Manhattan High School to work in women's garment industries. Success was broken into three time periods. The number of failures decreased with time and it was concluded that if a girl worked steadily for one year she would probably continue to be successful.

Variables related to success or failure were: ability to adjust to new situations, supervisors, personality, interest in work, home conditions, parental attitudes, and luck in acquiring adequate job.

Abel, T.M. and Humphreys, E.J. Institutional biographies of unstable subnormal girls. Amer. J. Ment. Def., 1942, 46, 514-518.

This study covers the reactions to treatment of six unstable mentally retarded institutionalized females.

Treatment consisted of manipulative tasks that produced concrete and visible objects. It was successful to some degree while treatment continued, but produced no lasting effect.

Anderson, V.V. Relation of mental defect and disorder to delinquency. Mass. Commission of Probation. June, 1918.

An early survey of 1000 juvenile delinquents which indicated that 23% were feebleminded.

Baller, W.R. A study of the present social status of a group of adults, who, when they were in elementary school, were classified as mentally deficient. Genet. Psych. Monog., 1936, 18, 165-244.

A follow-up study of the social adjustment of 196 mentally retarded individuals who had attended special education classes at Lincoln, Nebr., matched for age, sex, and nationality with 202 controls. Information gathered considered their educational, marital, vocational achievement. An individual was considered "adjusted" if completely self-supporting, and had no criminal record and no breach of ethics.

Results showed: that adjusted males have higher I.Q.'s than the non-adjusted. This does not hold for women. The most noticeable characteristic of adjusted women was better personal appearance and training in homemaking skills. The better adjusted men and women had $1\frac{1}{2}$ years more schooling. Only one third as many mentally retarded as controls were completely self supporting. This was the original study in a longitudinal series by Baller and Charles on this population.

Bassett, Dorothy M., Longwell, S., Geraldine, S., and Von Bulow, H. Social and occupational competence of idiots. Proc. Amer. Assoc. Ment. Def. 1939, 44, 97-102.

A report of the activities of institutionalized mentally deficient males calls attention to the value of more carefully studying of their latent abilities and characteristics in such areas as self-help, communication, socialization, self-direction and occupational activity(categories of Vineland Social Maturity Scale).

Bigelow, Elizabeth. Experiment to determine the possibilities of subnormal girls in factory work. Mental Hygiene. April, 1921, 302-320.

An early study of the adjustment of 23 mentally retarded girls who had been given nine months of special training for employment, 21 of whom were reported successful in the job secured for them.

Bijou, S.W., Ainsworth, M.H. and Stockey, M.R. The social adjustment of mentally retarded girls paroled from the Wayne, Co. Training School to determine social adjustment. Social adjustment was defined as the ability to function as wife and mother if married or economically self-supporting if unmarried. A 5-point rating scale ranged from 1 completely incapable to 5 excellent management or self-support. It was found that 73 were married and 28 single. Of total, 70% were rated in upper three categories as positively adjusted, 30% in lower two categories as negatively adjusted.

Butler, F.O. Mental defective in military service and wartime industries. Amer. J. Ment. Def., 1945, 50, 296-300.

During World War II 147 patients of the Sonoma State Home in Eldridge, California, entered military service. At the end of 1944, 48% were known to have made unsatisfactory adjustments, 20% had made a good adjustment and no information was available on 32%.(90% of these individuals had I.Q.'s between 50 and 79). The records of 339 patients who entered the labor force and earned over $50 per month frequently; 47.5% held steady employment; and 13.3% unknown. The authors concluded that mentally retarded should be given an opportunity to do their part even if success is less than 50%.

Butler, F.O. The defective delinquent. Amer. J. Ment. Def., 1942, 47, 7-13.

Describes composite traits of 770 males, 668 females, admitted to Sonoma State School, 1931-1941 classified defective delinquent. Male: age 12-20, I.Q. 50-70; first offense stealing, second a variety of misdemeanors; 32% foreign born; 24% with family history of mental retardation; 70% have been sterilized; 40% chance of parole; 24% chance of fair or better adjustment, and 14% chance of return to institution. Female: age 12-20, I.Q. 50-70; 70% committed for sex delinquency; 35% from broken homes; 35% show family history of mental retardation; 86% sterilized; 50% on parole do fair or better, and 22% never paroled.

Byrne, May E. After school careers of children leaving special classes in Minneapolis. Ungraded., 1925, 10(4), 75-86.

An early follow-up of 106 retarded individuals who had attended special education classes in Minneapolis concluded that proper attitudes and work habits were more important than I.Q. in determining job success; that most of those holding jobs had routine duties and were under close supervision; that since 26% had delinquency records all mentally retarded should be under constant care and supervision for the protection of themselves and society.

Calhoun, R.E. A follow-up of 100 normal and 100 subnormal delinquent boys. J. Juv. Res., 1928, 12, 236.

A follow-up comparing 100 mentally retarded delinquent boys with 100 delinquent boys of normal intelligence to determine the incidence of delinquency in each group. Of 114 charges against the retarded group, 30% were for truancy. Of 239 charges against the normal group only 5% were for truancy. Incidence of crimes against property was 4.5 times greater for the normal group

Camp, B.M. and Waite, T.E. Report on four cases of mental deficiency on parole. Amer. Assn. Study of Feebleminded., 1932, 37, 381-394.

Case histories of four girls of illegitimate birth, deserted by both parents of lower class origin were found to make gains averaging about 19 I.Q. points when the situation was changed. All were placed in jobs where employers were educated, understanding and supporting. It was under these placements that the I.Q. increases from 60 to about 79 occurred.

Carpenter, M.S. A study of the occupations of 207 subnormal girls after leaving school. Univ. of Mich., Dept. of Vocat. Educ. Special Studies, 1921, No. 2.

Employment records of 207 sixteen year old mentally retarded girls after leaving special education classes. They found a wide variety of jobs, but had best success in factories and lunchrooms. On fairly routine assignments, attitude reflected is that the retarded are like children and must be guided as such if use is going to be made of their abilities.

Channing, Alice. Employment of Mentally Deficient Boys and Girls. Children's Bureau Publ. No. 210, U.S. Govt. Print. Off., Washington, D.C., 1932.

Part I is an investigation of the employment success of 949 former pupils of special classes. 75% of the boys worked more than one half of the possible working period; unmarried girls were employed a shorter average time. Both boys and girls were unsatisfactory in 20% of their jobs and about 10% of the jobs for both ended in discharge. No relation was found between intelligence rating and either the steadiness of employment or the number of discharge.

Part II was an investigation of employment success of 151 formerly institutionalized boys and girls. The pre-institutional delinquency rate was 77% for the boys and 70% for the girls. 89% of the 151 who had been outside the institution for at least one year had had some employment as compared to 94% of the special class pupils who had been employed. Indications were that the boys from the institution did not have as favorable a work experience as those from special classes. Difference among intelligence levels was not found to relate to steadiness or success at work.

Coakley, Frances. Study of feebleminded wards employed in war industries. Amer. J. Ment. Def., 1945, 50, 301- 306.

In a study of the job adjustment of 37 feebleminded adults working in the war industries, it was found that they held their jobs for the duration of the war. It was also shown that there is no relationship between I.Q. and wages, and that personal traits and characteristics are the primary determinants of job success.

Crafts, L.W. Bibliography of feeblemindedness in relation to juvenile delinquency. Jour. Juv. Res., 1916, 1, 195-208.

Fairbanks, S.R. The subnormal child; seventeen years after. Mental Hygiene., 1933, 17, 177-208.

A comparison was made between 122 children who had required special education and 90 normals 17 years after leaving school. It was found that the majority of the subnormals were married; few had records of promiscuous activities; few were known by social service agencies; the majority were self-supporting; about one fourth of them were buying their own homes; and a minority had a court record of minor offenses. In compariosn with the normal group the subnormal married earlier; had more children; had a slightly higher divorce rate; more frequently received financial aid; were less active socially and held less skilled jobs.

Ferguson, T. Mental inefficiency in school children. Edinburg Medical Journal., 1921, 36, 526.

Follow-up of 70 students who 15 years previously had attended special schools for the mentally retarded in Edinburg for two years. A gross relationship between I.Q. and employment was found. Students with I.Q.'s of 45-65 were in full employment at various types of unskilled labor. Those with I.Q.'s less than 45 were still in the institution or at home unable to work. Of the 11 children with added physical defects only two were fully employed while six were unable to work.

Fernald, W.E. After-care study of the patients discharged from Waverly for a period of 25 years. Ungraded., 1919, 5, 25-31.

A follow-up of 568 patients discharged from Waverly over a 25 year period. Of these 101 were returned to the institution, and in addition 250 males and 52 females in the community were causing serious problems at the time of the study. It was found that those who adjusted to the community received support and guidance from friends and their families who supervised their activities. The implication that proper placement of the mentally retarded can help them adjust to community life marked a historic change in attitudes from Fernald's earlier views.

Foley, R.W. A study of patients discharged from the Rome State School for twenty-four year period ending Dec. 31, 1924. Psycho. Asthen., 1929, 34, 180-207.

A study of the patients discharged from the Rome State School over a 24 year period, identifying some elements of community adjustment and types of jobs held.

Foster, V.H. Employment status of subnormal girls and boys. J. Excep. Child., 1944, 10, 189.

A brief summary of a study made in Jackson, Michigan, on 29 pupils who left subnormal classes between 1941 and 1943 listing their occupations and wages. The bulk of the group was reported to have a satisfactory occupational adjustment but no criteria were given.

Goddard, H.H. Levels of intelligence and predictions of delinquency. Jour. of Juv. Research., 1929.

An appeal for more training programs which stress vocational and community adjustment for the mentally retarded. Statistics at that time revealed that there were more mental defectives in prison, than in the general population. The mental defective was more likely to become a criminal because of poor home environment and lack of special training schools geared to his capabilities.

Goddard, H.H. The Kallikak Family., 1912, New York: MacMillian.

The famous book which did so much to crystalize opinion concerning retardation 50 years ago. The Kallikak(good-bad) family was traced back through Deborah Kallikak, a girl of deficient mentality, who was an inmate of the Vineland institution at the time of the study. The Kallikak family tree brought Dr. Goddard to the conclusion that feeblemindedness is hereditary. The progenitor of Deborah was traced back to Martin Kallikak Sr. who during the Revolutionary War had an illegitimate son by a girl of subnormal intelligence. Martin Kallikak Jr., the great-great grandfather of Deborah, inherited his mother's retardation, according to Dr. Goddard's history, and became the ancestor of 480 descendents of whom 143 proved to be subnormal, while only 46 were regarded as normal. That side of the story refers to the bad branch of the family tree. The good branch of the family tree began when Martin Sr. made a respectable marriage and thus started another line of descendents of a contrasting sort. On this legitimate side of the family, all of the 496 direct descendents turned out to be "normal" people.

Greene, C.L. A study of personal adjustment in mentally retarded girls. Amer. J. Ment. Def., 1945, 49, 472-476.

Two groups of institutional retarded girls classified by staff as "well adjusted" or "problem" girls were compared on a number of personality and personal history measures. It was found that the "adjusted" group had been institutionalized longer, were more mature, had fewer commitments because of behavior difficulties and had come more often from other institutions and foster homes. The problem girls more often came from their own homes, had more visitors, wrote more letters, escaped from institutions more often and took things more personally.

Greene, Elizabeth. Histories of 79 feebleminded girls under supervision in the community. Mental Hygiene., 1923, 7, 785-795.

A follow-up of 79 mentally retarded girls placed in the community under supervision. The criteria of success were: no record of delinquency and working regularly. In comparing the 35 successes with the 43 failures it was found that: more failures than successes came from families with histories of mental disorder and alcoholism although the early environment of two thirds of both groups was poor; failures ran away more often and participated more often in immoral acts, but successes exhibited neurotic tendencies.

Hamilton, G. Some aspects of feeblemindedness. Mental Hygiene., April, 1923.

A follow-up study of 117 retarded persons who had received help from the Charity Organization Society of N.Y.C. Only one third of these individuals made an adequate adjustment on the criteria of steady employment and marital stability. The large number of failures was attributed to lack of adequate training facilities and poor supervision during the first year in the community.

Hanna, G.C. Occupational Efficiency of the Mentally Defective. Univ. of Minnesota Bulletin, Vol. XXVII, No. 55, College of Education Monograph No. 7, 1924.

The efficiency of 747 residents of an institution was found by rating them on daily work tasks as good, fair, or poor, and these ratings were then analyzed and related to mental age. The conclusion was reached that intelligence tests carefully and skillfully applied could predict the efficiency that could be expected in industry from adults testing under 13 years mentally.

Hegge, T.G. The occupational status of high-grade mental defectives in the present emergency: A study of parolees from the Wayne County Training School at Northville, Mich. Amer. J. Ment. Def., 1944, 49, 86-98.

The occupational status of 177 high-grade retarded paroled from Wayne County Training School during the war years. Results showed that: 88% were employed, 57.5% at jobs above unskilled level; of the employed two thirds were working in war industries, and there was no relation found between I.Q. and income.

Humphreys, E.J. Psychopathic personality among the mentally defective. Psychiat. Quart., 1940, 14, 231-237.

A case history presentation of problems of defective psychopaths which concludes that they are essentially similar to those of the superior psychopath, i.e., failure in social orientation to life goals.

Jeffrey, A.M. A follow-up study on the re-establishment of mentally defective girls in domestic science in an urban center under colony house supervision. Amer. J. Ment. Def., 1943, 48, 96-100.

The placement policy and training of girls at the Colony House in Toronto, Ontario, is reviewed. Girls from the Colony House are placed in homes as maids and expected to be well behaved.

Jewel, Alice M. A follow-up study of 190 mentally deficient children, excluded because of low mentality from the public schools of the District of Columbia Divisions I-IX. Sept. 1929 - Feb. 1940, Amer. J. Ment. Def. 1941, 45.

Of the 122 subjects that could be found: 32 had been committed to the District Training School and 10 were dead; 2 were wards of public welfare boards; 61 were at home and were receiving training there; 11 were at home and receiving training in schools or by private instruction; and 6 were in mental institutions or boarding schools. If a child was no problem to the parents he was considered adjusted. On this basis 28 girls and 35 boys were considered adjusted.

Johnson, H.A. A Summary of Case Histories of 447 Atypical Pupils Who Have left School. 1928, Oakland, Calif. Pub. School Bureau of Res. in Curriculum and Guidance.

This study is now unavailable for review.

Kellogg, Roberta M. A Follow-up Study of 100 Males Who Spent Some Time in the Special Education Class of the Public Schools of Newton, Mass. Unpublished masters thesis, Boston Univ., 1941.

A follow-up study was made of 100 retarded males who had spent some time in special education classes at Newton, Mass., to find out what social economic and personal adjustment had been made and to determine what improvements in training were needed. It was found that 42 had gone beyond special education, 9 were going to high school and 20 to trade school. At the time of the survey, 38 were employed full time, 7 part time, 42 unemployed, and 13 were unemployable. The types of jobs held were manual labor and semi-skilled crafts, obtained by going to the firm and asking for a job. Court records were held by 35%, but most were of a minor nature.

It was concluded that more vocational training and guidance were needed.

Kephart, N.C. and Ainsworth, N.H. A preliminary report of community adjustment of parolees of the Wayne County Training School. *Amer. J. Ment. Def.*, 1938, *43*, 161-166.

A comparison of 202 males(group 1) paroled from W.C.T.S. and 90 males(group 2) on status other than parole. The prehistories of group 1 showed 74% with delinquent records and 26% with problems of school retardation; whereas, in group 2, 90% had delinquency records and 10 problems of school retardation. The results of the follow-up showed that 74% of group 1 and 49% of group 2 had no court convictions since being released. Also, of group 1, 43% were wholly self-supporting, 29% partially self-supporting and 23% dependent; and of group 2, 22% wholly self-supporting, 32% partially self-supporting and 38% dependent.

Keys, Noel and Nathan, J. Occupations for the mentally handicapped. *J. of Applied Psych.*, 1932, *16*, 597-511.

A study of the jobs held by 2755 graduates of special education in San Francisco showed that: 1) one of 8 men and 1 of 14 women held jobs above unskilled labor; 2) 21% of males and 39.5% of females were employed in factories; 3) 19% of women were nursemaids and 15.7% worked in kitchens or laundries. The conclusion was that vocational training for the retarded must be general rather than specific.

Kinder, E.F., Chase, A. and Buck, E. Data secured during a follow-up study of girls discharged from Letchworth Village. *Amer. J. Ment. Def.*, 1941, *45*, 572- 578.

A comparison was made between girls paroled from a correctional institution and those paroled from a training institution after 8 years. The correctional institution group were delinquents with mean I.Q. of 63.2; those of the training school were diagnosed as defective and had mean I.Q.'s of 84.5. Girls in the school group were more frequently rated as well adjusted.

Kinder, E.F. and Abel, T.M. A comparative study of institutionalized and non-institutionalized subnormal girls. *Proc. Amer. Assn. Ment. Def.*, 1939, *14*, 169.

Interviews with two groups of retarded girls from Letchworth Village and from New York City compared attitudes, ambitions, and modes of adjustment. Both groups showed drive toward self-expression but in different modes corresponding to environment. The study concludes that adjustment in the one environment cannot be inferred from adjustment in the other.

Little, A.N. and Johnson, B.S. A study of the social and economic adjustment of 133 discharged parolees from Laconia State School. Proc. Assn. Study Feeblemindedness., 1932, 233-251.

A study which intends to demonstrate that trained mental retardates can make a good community adjustment. Material reported here was later included and expanded in Johnson, B.S. A study of cases discharged from the Laconia State School from July 1, 1924 to July 1, 1934. Amer. J. Ment. Def., 1946, 60, 437-445.(see below under Description Studies since 1945).

Lurie, L.A., Schlan, L. and Frieberg, M. A critical analysis of the progress of 55 feebleminded children over a period of 8 years. Amer. Jour. Orthopsychiatry., 1932, 2, 58-69.

This study was an analysis of 55 feebleminded children who had been referred to a clinic eight years prior. 60% made complete social adjustment. Adjustment was found to be related to: good home environment, personality of the child and how the recommendations of the clinic were carried out. Of the cases where recommendations of the clinic were carried out, 95% adjusted as compared to the 43% adjusted cases in which recommendations were not carried out. Frequency of good adjustment was found to be inversely related to I.Q. level.

Lytle, V. Adjustment of mentally limited girls on parole from a correctional institution. Smith Coll. Stud. Soc. Wk., 1942, 13, 163-164.

A follow-up of girls on parole from correctional school with I.Q.'s 70 to 86. Successful adjustment more a function of parole environment than I.Q. Support and supervision the critical factor. The type of prior delinquency did not differentiate.

Mckeon, Rebecca, M. A Follow-up Study of Special Class Boys Who Attended the Lodge St. School at Worchester, Mass., During the Years 1932-1942. Unpublished Masters thesis, Boston, Univ., 1944.

Two-hundred-ten mentally retarded boys who had attended special classes at Lodge St. School at Worchester were studied in a follow-up on their vocational and social adjustment to community life. 15.7% were married, 24% had appeared in court with larceny the most frequent recurring charge, 10% had spent some time in a reform institution, 20% had worked steadily since leaving school, with 8% having never been employed. Those married were supporting families successfully.

MacAlpine, Jean D. A study of the underwear industry with special reference to opportunities for subnormal girls. Mental Hygiene, Jan. 1923, 70-101.

A descriptive study of the employment opportunities for mentally subnormal girls in the underwear industry in New York. Opportunities for successful employment are limited because shops are small and a girl must of necessity be very adaptable and know how to do more than one job.

Macpherson, G.E. Parole of mental defectives. Amer. Assn. Ment. Def., 1935, 40, 162-167.

This study was an argument for the parole system. It reported that of 137 cases paroled over a nine year period from the Belcherow, Mass. State School, 27% or 29 of the 103 girls and 7% or 7 of 34 boys had to be returned from parole. In most cases poor behavior was the reason for returns. Criteria for parole selection were age(study did not consider subjects as stabilized prior to age 25), personality, emotional stability and training.

Matthews, M. One hundred institutionally trained male defectives in the community under supervision. Mental Hygiene, 1922, 6, 332-342.

This study concluded that with adequate training in school and with supervision of placement male defectives could make a successful adjustment to a community setting. Of 100 institutionally trained male defectives, all but 7% were self-supporting and only three were sent back to the institution.

Muench, G.A. A follow-up of mental defectives after 18 years. J. Abn. and Soc. Psychol., 1944, 39, 407-418.

Of the 40 individuals from the Opportunity School in Columbia, Ohio, who had been classified as mentally defective, eight were given a new battery of tests 18 years later. The mean increase of the group on the 1916 Binet was 15.4 points in I.Q. and on the 1937 revision was 27.2 points. Other significant increases were Army Alpha I.Q. and the Porteus Maze I.Q. There was a correlation of .66 between the changes in Binet I.Q. and the degree of social adjustment as measured by the paired comparison method on ten items. Every man of the eight had a socially acceptable job and none of the individuals had a court record.

Nesterer, Inez. Follow-up study of special class pupils. Ungraded, 1920, 5(5), 116-118 and 1920, 5(6-7), 150-154.

A follow-up study in community employment adjustment on 52 feebleminded students who had attended special classes in Seattle. The majority of special class pupils go into industry and fill essentially odd jobs, tend to be self-supporting in ordinary circumstances but unable to cope with new or unforseen conditions; seem unable to accept responsibility, but on the whole work well under supervision.

Ordahl, G. Industrial efficiency of the moron. Training School Bull., 1919, 145-153.
An eighteen day analysis of work output and wages in a canning factory of 48 girls from Sonoma State Home in California as compared to normal workers. Despite the pessimistic attitudes of the author it was found that a high proportion of the girls with low intelligence had earning power comparable to normals, although wage level tended to follow I.Q. level.

Padden, M.E. Study of 50 feebleminded prostitutes. Journal of Delinquency. Jan,, 1918, 1-11.

A study of 50 feebleminded, self confessed or court convicted prostitutes, concluded that social adaptability does not always depend chiefly upon intelligence. Conduct may be quite as profoundly influenced by certain types of emotional responsibilities as it is by certain types of defective intelligence.

Powdermaker, Florence. Social adjustment of the feebleminded. Annals of the Amer. Acad. of Political and Soc. Sci. Vol. 149, No. 283, Part 3, Some Social Aspects of Mental Hygiene, May 1930, 59-69.

General discussion of the adjustment of 432 high-grade mentally defective children from Letchworth Village who were institutionalized from 1-5 years. An essential factor in environmental adjustment of these children was the establishment of an adequate mode of compensation for sense of inferiority. Those who have been institutionalized establish this compensation through competition with their peers.

Raymond, Alice. Observation on the placement and supervision of mental defectives in the community. J. of Psycho Asthenics., 1923, Vol. XXVIII, 100-117.

A follow-up of 206 defectives paroled into working homes under these criteria: desirable personality traits, habits of neatness and industriousness, and care in matching personality of the individual with home employment requirements. The results after one year showed 128 still on parole, 48 discharged and 30 returned to institution.

Schmidt, Bernardine G. Rehabilitation of feebleminded adolescents. School and Society., 1945, 62, 409-412.

A study of 254 boys and girls(CA, 12-14) originally classified as mentally retarded(mean I.Q., 51.7) used as subjects in an experimental education program. The control and experimental groups were matched for: initial I.Q., number of years school experience, initial academic achievement and socio-economic status. The experimental group spent three years in the special program and were followed up to five years. The investigator reported a mean gain of 40.9 I.Q. points with 59.7% now classified in normal range; 79% were shown to have attained a level of personal and social adjustment equal or better than the highest one-fifth of well adjusted adults, and 83.4% were regularly employed. Little change was found in the control group.

Shimberg, M. and Reichenberg, W. The success and failure of subnormal problem children in the community. Ment. Hyg., 1933, 17, 451-465.

A study of 189 sub-normals 18 years of age and older who had four years of contact with the Judge Baker Foundation while adjusting to the community. The results showed: a slight correlation between economic status and adjustment; a positive correlation between personality traits and success; effective supervision is important to adjustment; there is little relationship between personal background and success, and chances of succeeding were greater if the recommendations of the Foundation were followed.

Stebbins, Inez. Social and economic rehabilitation of feebleminded girls. J. of Psycho-Asthenics., 1921, 26, 71.

Case studies illustrating the role of the half-way house(Colonies) in restoration of institutionalized girls to the community.

Steckel, M.L. A follow-up of mentally defective girls. Journal Soc. Psycho., 1934, 5, 112-115.

The case records and employment histories of 100 mentally retarded girls who had attended special classes. The view is expressed that the mentally retarded should be placed under legal guardianship after completing special education.

Stone, C.A. and Schmidt, Bernadine, G. The post-school of mentally handicapped girls. I: The home environment. II: Adjustment to School. III: Activities and adjustment to the post-school period. Education Adm. Supp., 1943, 29, 231-241.

A follow-up of 132 mentally retarded females who had been enrolled at three vocational centers. Half of the subjects came from low economic areas, one-fourth from broken homes. A period of idleness between the completion of school and first employment caused the most serious adjustment problems. No relationship was found between I.Q. and percent of time employed.

Storrs, H.C. A report on an investigation made of cases discharged from Letchworth Village. J. Psycho-Asthenics, 1924, 34, 220-232.

A study of social and vocational adjustment of mental retardates discharged from Letchworth Village. 40% of successful males were mildly retarded, 17% moderately retarded and 8% severely retarded. Among the females 58% of those who adjusted successfully were mildly retarded, 21% moderately and 9% severely and 12% undiagnosed. Among males 78% were steadily employed, 10% worked steadily but with many job changes and 12% worked intermittently. Among females 44% were totally self-supporting, 7% partially so and 49% dependent upon others.

Sutherland, E.H. Mental deficiency and crime. In: K. Young, (ed) Social Attitudes. New York, Henry Holt, 1931.

A review and summary of approximately 350 American studies of the intelligence of 175,000 delinquents. Conclusions: 1) the proportion of delinquents diagnosed feebleminded had been steadily decreasing; 2) the proportion of feebleminded delinquents have varied widely in studies; 3) feeblemindedness has not been demonstrated to be a generally important cause of delinquency; 4) the feebleminded delinquents behave about as well as the non-feebleminded; 5) studies do not in general indicate that the amount of intelligence exercises a decisive influence in determining "goodness" of behavior on parole; 6) no generally significant relationship between intelligence and recidivism has been demonstrated; 7) no consistent relationship between age of delinquents and intelligence has been demonstrated; 8) relationship of type of crime to intelligence has not definitely been substantiated.

Taylor, Margaretta. After care study. Ungraded. Nov., 1925, 11(2), 25-34.

A follow-up of 400 children who had attended special education classes, from one to three years after leaving school. 83.5% were judged employable. Types of home environment, background and types of jobs held are reviewed.

Thomas, H.P. The employment history of auxiliary pupils between 16 and 21 years of age in Springfield, Mass. J. of Psycho-Asthenics.,1928, 33, 132-148.

The employment histories of 142 mentally retarded who had attended special education classes in Springfield, Mass. Results showed a high rate of job turnover for both sexes, but especially for girls for whom 32% of jobs were held less than one month. Boys obtained jobs more quickly than girls and tended to hold them longer; for both, the longest idle period was between leaving school and securing the first job.

Town, Clara H. An investigation of the adjustment of the feebleminded in the community. Psychol. Clin., 1931, 20, 43-54.

A study of adaptation of 136 mentally retarded males and females released from Rome State School. Criteria for adjustment: self-supporting, independent from Welfare agencies, and having no court record. Only 5% met all of the criteria of adjustment, all males. No common factor which might account for success was found. Of the 10% males and 58% females who married, all the females and all but one of the males were judged unstable and poorly adjusted. The author concludes that supervision on placement is crucial to adjustment.

Unger, E.W. and Burr, W.T. Minimum Mental Age Levels of Accomplishments: A Study of Employed Girls of Low-Grade Intelligence. Univ. of Albany, 1931.

A study of 2465 employed mentally retarded females, indicating the minimum M.A. levels for various jobs. Personality factors were found to be of greater importance in determining job success as compared with intelligence.

Wallace, G.L. Parole of the feebleminded. Proc. Amer. Assoc. Study of Feebleminded, 1918-1919, 23, 60- 81.

A study of factors leading to successful parole from institution of 85 cases studied showed that most who return to the institution do so within the first year on parole. No relationship was found between age at admission or duration of institutionalization and return; between duration of institutionalization and success on parole; between occupation and success on parole; or between previous history and success. A relationship was found between MA and success, temperament and success, and supervision and success.

Wallace, G.L. A report of study of 100 feebleminded girls with a mental rating of 11 years or over. Proc. and Addresses of the 46th Ann. Session of the Amer. Assoc. for the Study of the Feebleminded. 1922.

A study of 100 mentally retarded females with CA of 16 and over and MA of 11 and over to determine why they were institutionalized when others with same MA were not. It was found that the outstanding traits before institutionalization were: retarded in school, untrustful, temper explosions, lazy, untidy, stubborn, nervous, excitable, peculiar and immoral. Only six came from stable homes. Although 23 were out on parole and doing satisfactorily at the time the study ended, the author feels this will continue only as long as close supervision is maintained. There was no control group included for comparison.

Wallin, J.E.W. A study of industrial record of children assigned to public school classes for mental defectives and legislation in the interest of defectives. Jour. Ab. Soc. Psychol., 1922, 17, 120-131.

An early study based on teachers' estimates of the probable industrial efficiency of 436 children enrolled in special schools for mental defectives in St. Louis. The teachers were asked in a questionnaire to estimate the degree of competency the pupils would probably show in making their living and taking care of themselves after leaving school. The pupils were classified according to: 100% self-supporting, 75% supporting, 50% supporting, 25% supporting and totally dependent. These ratings were compared to the children's I.Q. for each economic group. The reasons for judging certain pupils capable of self-supporting were mainly good judgment and skill, industry and skill, intelligence, energy and perseverance. The totally dependent were lacking in intelligence or industry, were infantile, hydrocephalic, visually handicapped, paralyzed, morally and emotionally unstable, mentally unbalanced, of delicate health or subject to poor nervous or motor control. Results showed that teachers overestimated the potential ability of many low-grades and underestimated the potential ability of many high-grades. The author concluded that a child's industrial capability can not be adequately diagnosed by intelligence tests alone which are only an indication of scholastic success.

Weisman, G. Intelligence as a factor in the later adjustment of child guidance patients. Smith College Stud. Soc. Work., 1943, 14, 245-246.

A comparison of 25 bright with 25 dull children at the Judge Baker Guidance Center to determine the effect of intelligence on early adjustment. The results indicated that dull-normals adjusted slightly better; in both groups those whose original adjustment had been good continued to adjust well; and original failure bright children seemed better able to work out difficulties; community resources are better for bright children. When failure was due to parental rejection neither group adjusted successfully, and age had a favorable effect on adjustment.

Whitcomb, Marion A. A comparison of social and intellectual levels of 100 high-grade mental defectives. Amer. J. Ment. Def., 1945, 50, 257-262.

A study of 100 mentally retarded institutionalized girls to determine why some responded to the training program and others did not when I.Q. was the same. The girls were grouped into: A) ready for parole, B) never considered because of delinquent behavior, C) never considered because of physical handicaps, and D) never considered because of apathy and laziness. It was determined that emotional adjustment is the crucial factor in social and vocational success in this setting.

Whitney, A. A statistical study of children admitted and discharged from Elwyn. Amer. J. Ment. Def., 1948, 53, 182.

The relationship between age at discharge and successful adaptation was studied. The criteria of success were: to hold a job, pay room and board, and to have no court record. It was found that with increasing age the probability of success increased. It was concluded that for mentally retarded to gain full emotional maturity they should remain in the institution at least until age 22 and preferably to age 27. The criteria of selection for discharge were not noted.

Winifred, C. Amelia. Follow-up survey of children in the developmental schools of Los Angeles. Los Angeles City Schools, 1926, 6(2), 2-10.

A follow-up of 252 out of 350 children who had been enrolled at the Developmental Schools in Los Angeles but had left. It was found that: 54% were still in school, 5.2%(girls) married, 24.5% working, 2.8% temporarily out of work, 7.4% cared for at home, and 5.2% in institutions. It was concluded that the mentally retarded have the ability to get a job, but that a period of occupational training is needed and that these children were not in special classes long enough to benefit from them.

Woolley, Helen T. and Hornell, H. Feebleminded Ex-school Children: A Study of Children Who Have Been Students in Cincinnati Special Schools. Studies from the Helen S. Trounstine Foundation, Cincinnati. 1921, Vol. 1(7).

A follow-up of 202 children not all mentally retarded who had attended special schools in Cincinnati. It was found that most subjects came from poor unstable families, one third had court records, 41% were employed, 10% helping at home, 6% at home and not working, 7% in service, 8% married, 15% lost track of and 12% in institutions.

III. DESCRIPTIVE STUDIES, AFTER 1945

Appel, M.J., Williams, C.M. &Fishell, K.N. Factors in the job holding ability of the mentally retarded. Voc. Guid. Quart., 1946- 1965, 13, 127-130.

Ability to hold a job six months with steady competitive employment was a better criterion of success than ability to get a job initially. Subjects were 41 retardates referred to the New York Work Training Center. Optimal training period in the workshop was found to be sixteen months.

Appel, M.J., Williams, C.M. and Fishell, K.N. Significant factors in placing mental retardates from a workshop situation. Personnel Guid. J., 1962, 41, 260-265.

This study attempted to discover differences between 25 terminal(long term) retarded trainees and 12 employed retarded trainees. For this purpose a Work Evaluation Report(WER) was developed, which covered three general areas: 1) general abilities, 2) work approach, and 3) social attitudes and adjustment Characteristics in the area of general abilities on the WER such as learning speed, attention span, manual dexterity(gross) and following instruction(oral) showed significant differences between groups. It was discovered also that the employed group had a slightly higher I.Q., was slightly older, had higher reading and arithmetic grades and spent less time in the workshop than the terminal group. The non-verbal scales of the Wechsler test also distinguished the employed from the terminal group.

Astrachan, Myrtle. Group psychotherapy with mentally retarded female adolescents and adults. Amer. J. Ment. Def., 1955, 60, 152-156.

The effects of group psychotherapy on adjustment following release from institutional residence. Subjects were mentally retarded females at Rosewood State Training School, Tenn. of whom 31 received therapy and 34 did not. Improvement was defined on consensus of staff opinion and attitude of subjects toward leaving the institution. The success of the parolee varied according to the differential type of the emotional disturbance. Depressive, passive subjects and those of a mild paranoid trend showed greatest improvement and schizophrenics, aggressives and those who displayed a tendency to act out their conflict showed least improvement.

Badham, J.N. The outside employment of hospitalized mentally defective patients as a step towards resocialization. Amer. J. Ment. Def., 1955, 59, 666-680.

A review of 108 male patients who had been on Outside Daily Employment or on

License for at least 12 months to determine the effectiveness of outside employment. Factors related to success were: skilled slection and work placement, good work environment, suitable place of residence, and skilled supervision. Factors related to failure: poor supervision, personal shortcomings and history of sexual or conduct disorder.

Baller, W., Charles, D.C. and Miller, E.L. Antecedents of Change in Mentally Retarded Persons at Mid-life: A longtitudinal Study. Research funded by Voc. Rehab. Ad., Dept. of HEW, VRA Grant No. RD-991-62.

Follow-up of two groups studied by Baller in the 1930's to help answer the question "What becomes of retarded children?" Purpose of the study was: 1) to locate members of the mentally retarded(low) and dull normal(middle) groups originally studied in 1935 and 1937 respectively; 2) study present functioning and status of these persons; 3) with aid of records and interviews examine the principal causes of various levels of life adjustment. An additional comparison group composed of individuals of average abilities whose records were on file at the same school were added for the present study. Variables studied were: location, economic status, marital status; occupation and employment; institution; citizenship; social activities; physical health; law conformity; and family character. Results indicated that participation in social life was negatively related to intelligence in these three groups. The life histories of the low group showed they had been deprived culturally. The middle and the high groups were differentiated in their social strivings in an upward direction. Both middle and high groups had a low death rate; low group had a high death rate. Divorce rate was 2 to 10 times the national average in the two lower groups.

Bobroff, A. Economic adjustment of 121 adults formerly students in classes for mental retardates. Amer. J. Ment. Def., 1956, 60, 525-535.

A comparative study of the economic adjustment of two groups of adults who as children were classified as mentally retarded in the Detroit Public School 12 years earlier. The group which received more advanced training showed higher achievement levels and more frequent holding of bank accounts or securities. No difference were shown in number of jobs held, length of waiting periods between jobs, and no relationship was found between earlier I.Q. and achievement scores and later earnings.

Bobroff, A. A survey of social and civic participation of adults formerly in classes for mentally retarded. Amer. J. Ment. Def., 1956, 61, 127-133.

A comparative study of the social and civic adjustment of two groups of adults who, as children, were classified as mentally retarded in the Detroit Public Schools 12 years earlier. The group which received more advanced training had a better voting record and more varied and extensive interests and social activities. Information was assembled from personal interviews and voting, traffic, police and service records.

Bogod, E. Ex-pupils of an E.S.N. school. Special Education, 1959, 48(3), 31-33.(London)

A study of employment success of 146 ex-pupils in a secondary day school for educationally subnormal boys in London. Boys of low intelligence coming from poor cultural and social environments can achieve a high degree of stability and successful employment with careful placement and suitable vocational training. Those receiving special education treatment only in their later school life are more apt to find social adaptation difficult after leaving school.

Bradley, Charles. Pediatrics, mental retardation and delinquency. J. Amer. Med. Assn., 1955, 157, 101-108.

A discussion of the mentally retarded in relation to juvenile delinquency with these conclusions: delinquency results when child is repeatedly thwarted. The mentally retarded have a limited ability to comprehend social standards, are highly suggestible, and often unable to find approval in normal endeavors.

Brandon, M.W. A survey of 200 women discharged from a mental deficiency hospital. J. Ment. Sci., 1960, 106, 355-370.(London)

A follow-up report on 171 adult feebleminded women discharged from Fountain Hospital, London. Most subjects had histories of poor home environments during childhood and of physical disabilities; all subjects at time of study had been living in the community for five years. 23 out of 171 were not employed; one third of 171 were judged at that time in need of additional help with employment and/or accommodations. Those subjects now judged to need help had been described at admission to hospital as inhibited and hysterical; those now judged not to need help had been described as bad tempered, dishonest, out of control.

Brown, Sheldon J., Windle, C. and Stewart, Elizabeth. Statistics on a family care program. Amer. J. Ment. Def., 1959, 64, 535-542.

A study of factors leading to successful placement in a family care program of 164 mental defectives released from Pacific State Hospital, California. Favorable prognostic indices were ages under 15 for males only, I.Q. above 40 and hospitalization less than five years. About two thirds of the failures were due to intolerable patient behavior and somatic medical problems. More behavior problems occurred in the young of high I.Q. and recently hospitalized.

Butler, F.O. California's legal approval and program in the rehabilitation of the defective and psychopathic delinquent. Amer. J. Ment. Def. 1948, 53, 76-79.

Describes attempts of the state of California to provide psychiatric treatment for defective and psychopathic delinquents rather than commit them to penal institutions.

Carriker, W.R. A comparison of Post-School Adjustment of Regular and Special Classes of Retarded Individuals. 1957, U.S. Dept. of H.E.W. Nebr. State Dept. of Educ. Spons. by Coop. Res. Branch.

A comparative study of the present status(1957) of a group of mentally retarded individuals who had been trained in special classes in Omaha and Lincoln, Nebr., Public Schools with a comparable group who had received training in regular classrooms between five and ten years earlier. A large majority of both groups made successful occupational, social, marital and civic adjustments. Special class subjects tended to drop out of school earlier, to have poorer family background, to have had more frequent institutional experience and more court referrals, but to have higher employer ratings.

Carson, E.O. Jobs held by educable mentally retarded high school graduates. Jour. Sec. Educ., 1965, 40, 19-21.

This study was a break-down and classification of jobs held by 49 educable mentally retarded subjects. The survey concluded that as an adult the mildly retarded tends to disappear in the community and become more or less self-supporting. There is a wide variety of jobs for which these people can be trained but a strong educational program is necessary to ensure optimal placement.

Cassidy, Viola M. and Phelps, H.R. Post-School Adjustment of Slow Learning Children; A Study of Persons Previously Enrolled in Special Classes in Ohio. Columbus, Ohio. Bureau of Special and Adult Education. Ohio State Univ., 1955.

A study of the quality of adjustment to post-school life by 163 students who had been enrolled in special classes in Ohio for slow learning children.

Information was gathered by means of a Personal Interview Form. In community life, the members of the sample appeared to follow fairly typical patterns of activity. Only 10.5% of the total sample had never been employed; only 2 of the 163 cases were institutionalized. Success on the job was associated with good personal appearance, social acceptability, ability and willingness to do a full share of work of acceptable quality.

Chandler, C.S., Schaffer, A.J. and Coe, R.M. Arraignment, examination and confinement of the mentally defective delinquent. Amer. J. Ment. Def., 1959, 63, 723-727.

A questionnaire on the legal basis for handling defective delinquents showed that only 13 of the 41 states participating had laws regarding this classification. There seemed to be little agreement among the states regarding legal or clinical aspects of this problem.

Charles, D.C. Ability and accomplishment of persons earlier judged mentally deficient. Genet. Psychol. Mongr., 1953, 47, 3-72.

A longtitudinal follow-up of a study made by Baller(1935), relocated as many as possible of the original 206 subjects and obtained data on present(1953) intellectual abilities, social status and accomplishments. The subjects as a group showed considerable improvement in economic conditions, employment rates and amount of assistance since 1935. The great majority of their children proceeded through school with little or no retardation and had mean I.Q. of average range. The present study reinforces Baller's earlier conclusion that the subjects had fared better, as a group, than early prognosis indicated they might.

Charles, D.C. Adult adjustment of some deficient American children. Amer. J. Ment. Def., 1957, 62, 300-304.

A review of the work carried on by Baller(1936) and Charles(1953) with emphasis that the great differences in abilities and achievements among the members of the groups should dispel any notion that persons who give evidence of low ability in childhood develop and perform according to a rigid stereotype.

Clarke, A.D.B. Employability of mentally subnormals. Trans. Assoc. Industrial Med. Officers.(Gr.Br.), 1961, 11, 78-81.

A descriptive account of the rehabilitation program of the Manor House, London. The training program aimed at community placement, duplicating industrial conditions through sub-contracting. Follow-up of 100 cases showed 60% on their own, 26% still under supervision of Manor House, 10% in difficulties. The program also includes some cases with I.Q.'s below 50.

Cohen, J.S. An analysis of vocational failures of mental retardates placed in the community after a period of institutionalization. Amer. J. Ment. Def. 1960, 65, 371-375.

Factors other than lack of job skills were studied to determine the reasons for failure of 57 mental retardates in 73 placements in the community after a period of institutional training at Johnston Training and Research Center, New Jersey. With only a few exceptions the students were able to meet the skill and strength demands of the job, however, one third of the cases had difficulty in adjustment to the community rather than the job and one third conveyed poor attitude with regard to the job. Conclusions of the study suggested that an institutional program must be designed as part of a gradual progression to community life and the acceptance of additional responsibility.

Collmann, R.D. and Newlyn, D. Employment success of educationally subnormal ex-pupils in England. Amer. J. Ment. Def., 1956, 60, 733-743.

A follow-up of educationally subnormal ex-pupils from three residential and six day schools in England to determine employment success. Results: 1) success, 61%, employed at time of interview, hold no more than three jobs in the first year after leaving school, 2) partial success, 11%, changed jobs frequently but employed at time of interview, 3) failure, 16% failed to hold job, not employed at time of interview, not looking for job, 4) unemployable, 12% never sought employment. Most of those employed were found in unskilled or semi-skilled jobs.

Collmann, R. and Newlyn, D. Employment success of mentally dull and intellectually normal ex-pupils in England. Amer. J. Ment. Def., 1957, 61, 484-490.

The employment histories of 106 intellectually normal and 200 mentally dull ex-pupils from five secondary modern schools in South Essex were compared with the histories of 223 educationally subnormal ex-pupils. The percent of those employed in skilled work increased steadily with I.Q. being 63% for the normal group, 31% for the mentally dull and practically zero for the subnormal group. The percent in unskilled work was reversed, being 10% for the normal, 24% for the dull and 39% for the subnormal group. The percent of failures for the normal and dull groups was negligible, however, for the subnormal ex-pupils the figure was 16%. According to employers' statements the main reasons for failure and partial success for the three groups given in order of importance are: character defects, inefficiency, temperamental, instability and home conditions.

Craft, M. Withdrawals from license in mental deficiency. Amer. J. Ment. Def., 1958, 63(1), 47-49.(British)

A British investigation of 368 mental defectives who lost their license showed that the reasons were: 37% mental illness and personality factors; 33% lack of work output; 22% social behavior; and 9% for external reasons(e.g., illness).

Deno, Evelyn, Henze, R., Krantz, G., Barklind, K. Retarded Youth: Their School-Rehabilitation Needs. VRA RD-681, 1965.

The project was designed to explore for methods of operating which might alleviate deficiencies in traditional school-rehabilitation functioning. From 1960 through August, 1964, 603 retarded students were served in a demonstration unit, the primary purpose of which was to demonstrate an in-school facility for prevocational evaluation, planning and training. Students were referred to the unit when they were considered by their school counselors and teachers as ready or about to leave school. The initial evaluation process consisted of group observation and testing, tryouts in the work laboratories, psychological study and review of school reports and other information. Of the 603 students, 34 were in the project unit in November, 1964, 244 had been returned to school for more training and the remaining 325 were out of school. The students in school will gradually be referred to the unit as they complete or are no longer able to profit from the programs in which they have been placed. In addition, the project located and interviewed some 400 former special class students who had dropped out of school in the three years immediately before the project began. 65% of these students had not finished school and many felt that they had been forced to leave school. Many wished they had had more schooling and over one-third of these students said they were making plans to get further education or training.

Deprospo, C. Opportunities for the exceptional child. Proc. Conf. Child. Research. Clin. Woods School, 1954, 19-29.

General discussion of factors affecting employment of mentally retarded. Most common reasons for failure are listed. A list of jobs held by mentally retarded is given.

Dicarlo, L.M. A Comparative Study of Some Characteristics in Achievers and Non-achievers Among Children with Retarded Mental Development. Syracuse, New York, Syracuse University Research Institute, 1958.

A comparison of 50 achievers and 50 non-achievers among mentally retarded children to determine what behavior patterns would differentiate them. Non-achievers scored below achievers in degree of retardation, Metropolitan Achievement Test scores, language structure, articulation, and stimulability.

Dinger, J.C. Post-school adjustment of former educable retarded pupils. Except. Child., 1961, 27, 353-360.

A follow-up study of 144 former pupils in special education at Altoona, Pennsylvania. Information was gathered from visits to homes, employers and by questionnaire. The results showed: occupational success depends more on personal characteristics than on I.Q.; retarded adults are capable of independent economic adjustment, and employers did not identify these employees as retarded.

Dunn, W.H. The readjustment of the mentally deficient soldier in the community. Amer. J. Ment. Def., 1946, 51, 48-51.

A study of the readjustment of the mentally deficient soldier to community life. If suitably placed while in the service he may continue to make good adjustment in the community if placed under similar conditions. Frequent transfer leads to insecurity and instability.

Ferguson, T. and Kerr, Agnes W. After-histories of boys educated in special schools for mentally handicapped children. Scotland Med. Jour., 1958, 3, 31, 38.

This study was a parallel to Ferguson's(1955) investigation of community adjustment of women. Information was obtained on home background, level of achievement in school, marital status and employment status at present of 203 men 25 years of age, who had left Glasgow schools nine years prior to the study. Twenty-four men were unemployed. Physique, I.Q., home assessment and father's employment record were related to type of employment (skilled and unskilled) and amount of employment. 63% had experienced no unemployment for past two years. 65% had no court records and 64% were married.

Ferguson, T. and Kerr, Agnes W. After-histories of girls educated in special schools for mentally handicapped children. Glasgow Med. Jour., 1955, 36, 50-56.

Information was obtained on home background, level of achievement in school, marital status and employment status at present of 207 females, 22 years of age, who had left Glasgow schools six years prior to the study. Little or no relationship was found between home assessment and I.Q. The 26% who had married was fewer than the total percent of all 22 year-olds married in Glasgow. None of the girls with an I.Q. of less than 50 were married. Of the 152 unmarried women, 30 were not employed at the time of the study. 27% of the women who had worked, worked continuously for one employer.

Fitzpatrick, F.K. The imbecile in industry. J. Midland Ment. Def. Soc. (England), 1959, 9, 35-39.

A study of the employment of "imbeciles" in British Industry, generally considered unemployable. These subjects did productive work of a simple nature in factories where special arrangements were made for their supervision.

Gage, R.M. and Wolfson, I.N. Four years of experience with day work programs at Letchworth Village. Amer. J. Ment. Def., 1963, 67, 563-568.

A study of 376 patients involved in a day work program after it was in operation four years showed that 50% were out on permanent work placements or returned to their families. Of the 189 returned to the community, 23% had I.Q.'s from 41-50; 27.5% resided in the institution from 21 to 40 years, and 10% were 41 years of age or older.

Giraud-L'Herbault, G. and Lafon, R. The problem of marriage and its consequences in the mentally deficient. L'Evoluation Psychiatrique, 1964, 29(1), 131-139.

A study of 28 families in which mothers were mentally deficient. The homes were in general characterized by poverty, alcoholism, immorality and misery. There were 125 living children from these families, their I.Q.'s being distributed: under 50=30%; 51-80=45% and normal=25%. Most of the children had personality and character disorders. The majority had been separated from their families. The authors concluded such marriages should be discouraged.

Grant, J.R. Results of institutional treatment of juvenile mental defectives over a 30 year period. Canadian Med. Assn. Jour., 1956, 75, 918-921.

An assessment of results of institutional treatment of 310 mental defectives in the Province of Alberta. 61.6% were successful, that is, the trainee had maintained a position in the community without conflict leading to official interference. Factors contributing to ultimate success or failure were personality, attitude, character, age, training period and I.Q. Character disorder was found to be a main factor in success or failure of the borderline and moron groups.

Grigg, A.E. Criminal behavior of mentally retarded adults. Amer. J. Ment. Def., 1948, 52, 370-374.

A study of criminal behavior of three small groups of adult males at Virginia State Penitentiary who were tested as "severely" mentally retarded(IQ 47-63).

The groups were divided according to crimes committed which were impulsive, momentary acts, crimes which were illogical acts, and crimes which were reflections of typical delinquent behavior. The study concluded that a higher percentage of the retarded criminals commit crimes of an impulsive nature and from inability to foresee future consequences, rather than in typical delinquent behavior patterns.

Gunzburg, H.C. Therapy and social training for the feebleminded youth. Brit. J. Med. Psychol., 1957, 30, 42-48.

An analysis of a British training school for mentally retarded boys. The method emphasizes social responsibility and self-adjustment. Of 148 boys in a seven-year period, 82 were given outside work opportunity. The majority succeeded, including 12% with I.Q.'s below 50. Those with pretraining delinquency more successful in getting and holding jobs. Non-delinquent boys tended to have been hospitalized for reasons which more frequently make them unemployable.

Guralnick, D. Vocational rehabilitation services in New York City for the mentally retarded: an analysis of 248 cases. Amer. J. Ment. Def., 1956, 61, 368-377.

An analysis of 248 mentally retarded individuals from 1953-1955 to determine what levels of retardation lend themselves to vocational rehabilitation. The subjects were both male and female; age 16-30+, with a wide range of I.Q. Five types of disposition made: 1) the rehabilitated group, 69 individuals aided to adjust successfully in employment; 2) made their own adjustment, 22 cases who withdrew to make own adjustment or due to marriage, etc.; 3) unfeasible, 88 cases either below 50 I.Q. or severely involved physically or emotionally; 4) declined or did not respond, 36 cases who wanted service on their own impractical terms or lost interest and did not return; 5) on open status, 33 cases still in rehabilitation with no final disposition made as yet. Conclsuions: 1) few persons below I.Q. 50, even less below 54, were able to benefit by rehabilitation services for competitive employment; 2) more persons were found not feasible for rehabilitation due to severe secondary disabilities rather than primary disabilities as a hindrance to vocational rehabilitation.

Harms, Mary. Casework with adult mental defectives in a placement program. Ameri. J. Ment. Def., 1947, 51, 510-518.

A discussion of casework objectives and attitudes in placement of mentally retarded in 1947. The defective is described as essentially narcissistic, unable to identify with other people, lacking in judgement and foresight, rigid and unemotional.

Harms, Mary. Casework in the social adjustment of adult defectives. Amer. J. Ment. Def., 1950, 54, 237-243.

A descriptive study of social adjustment in the group placement of mental defectives in the community. Patients were placed in clusters in a community with a social worker active in helping them adjust and make friends. Cluster one was considered successful with the establishment of a family type of relationship within the group. Cluster two was considered less successful due to sex and age difference.

Harold, E.C. Employment of patients discharged from St. Louis State Training School. Amer. J. Ment. Def., 1955, 60, 397-402.

An analysis of the actual experience in the community of 74 patients who had been cared for in the St. Louis State Training School for at least six months prior to discharge. Information was obtained from interviews with the patient themselves, their employers, and the records of the institution. Emotional stability and job assignments which did not impose unrealistic demands were found to be more significant than I.Q. in successful employment. Patients were better prepared for institutional and domestic employment than for industrial jobs.

Hartzler, Ethel. A follow-up study of girls discharged from the Laurelton State Village. Amer. J. Ment. Def., 1951, 55, 612-618.

A study of factors leading to success or failure in community adjustment of discharged delinquent girls from Laurelton State Village. Factors considered as predictive were the degree of delinquency prior to and during institutionization, duration, and amount of success of previous paroles, and the home environment to which the girl returned.

Haskell, R.H. and Strauss, A. One hundred institutionalized mental defectives in the armed forces. Amer. J. Ment. Def., 1949, 48, 67-71.

A study of 100 high-grade mental defectives from Wayne County Training School, who had been drafted or enlisted into the military service. After six months of service 88% had continued to function adequately with 31% receiving promotions. The percent of discharges or convictions for this group was not higher than their own unit as a whole.

Hiatt, M.S. Casework services in community placement of defectives. Amer. J. Ment. Def., 1951, 56, 204.

A review of casework examples of community placement of mental defectives, from Columbus State Hospital, Ohio. 58 of 107 patients placed in 1945 and 1946 with other than relatives, are still living in the community. More than half are doing productive work. Emotional stability was a more important factor than intellectual level in community adjustment.

Hilliard, L.T. Resettling mental defectives: psychologic and social aspects. British Med. Jour., 1954, 1, 1372-1374.

A follow-up of 175 female mental defectives settled in the community after an average 20 years of institutional living at Fountain Hospital, London. 140 were employed mostly doing domestic work. One major problem with female mental defectives was found to be the risk of pregnancy. Conclusion drawn: that whatever the I.Q. the patients need experience in the normal community life if they are to survive in it.

Hinkle, Van R. Criminal responsibility of the mentally retarded. Amer. J. Ment. Def., 1961, 65, 434-440.

A discussion of the responsibility of mental retardates for acts which transgress the law. The conclusion was that treatment should be geared to fit the offender rather than the offense.

Hunt, W.A., Wittson, C.L.,and Hunt, Elina B. Serviceability of military personnel of low intelligence. J. Clin. Psychol., 1954, 10, 286-287.

A comparison study of two groups of individuals, one of low intelligence only and the other of low intelligence plus psychiatric symptomatology, followed through a period of military service. Both groups had higher discharge rates for neuropsychiatric reasons, medical reasons and bad conduct than normal; however, the group of low intelligence plus psychiatric symptomatology had a higher discharge rate than the low intelligence group.

Itoga, K. and Tanaka, M. A study of the social adjustment of the feebleminded. Jap. J. Educ. Psychol., 1956, 3, 204-213.

A factor analysis of data drawn from interviews of 903 mentally retarded. Social adjustment involved multiple factors, including need for adjustment, stability in environment, occupational status, acceptance by others.

Johnson, B.S. A study of cases discharged from Laconia State School from July 1, 1924 to July 1, 1934. Amer. J. Ment. Def., 1946, 50, 437-445.

A follow-up review of 275 patients discharged from Laconia State School over a ten-year period(1924-1934). Of the total, 16 females and 5 males made fully successful adjustment, one female and two males failed, while the balance made marginal adjustments.

Katz, E. Independent living rehabilitation programs for the seriously handicapped mentally retarded adults. Train. Sch. Bull., 1964, 61, 34-44.

A description of a rehabilitation program for seriously handicapped mentally retarded adults in San Francisco, showing improvement in productivity of 16 out of 22 enrollees over a period of time.

Keeler, Kathleen F. Post-school adjustment of educable mentally retarded youth educated in San Francisco, Dissert. Abstr., 1964, 25(2), 936-937.

Investigation of social and vocational adjustment of graduates 2 to 5 years earlier from a secondary special education program(64 males, 51 females). Assessment was based on personal interviews with subjects and employers. Findings: 1) 21 subjects married; 2) 18.8% males, 29.4% females continued education 3) 7 males, 8 females had received vocational rehabilitation services; 4) 40% subjects held part or tull-time jobs; 38.3% never employed; 21.7% previously employed but not now; 5) job classification: 21.7% unskilled; 10.9% semiskilled 30.4% clerical; 8.7% agriculture; 7) ability to interpret and follow verbal directions seemed a factor of job success.

Kennedy, R.J.R. The Social Adjustment of Morons in a Connecticut City. Hartford: Mansfield-Southbury Training Schools Social Service Dept., State Office Bldg., 1948.

A follow-up comparison of 385 subjects, 256 of which were morons and 129 non-moron controls. The average or typical moron in Millport at the time of the investigation(1946-1947) is a second generation Italian, 24.5 years of age, with termination of formal education at 8th grade level. The final chapter summarized the results of the study under five headings: 1) Parental family background: moron's families are less well-adjusted, more problematical and disturbed, and economically less well off than non-moron's families. 2) Marital adjustment: both marry at approximately same age, have same average number of children. Morons have more illegitimate children, step and adopted children and more marriages terminated by divorce. 3) Economic adjustment: more morons are in laboring occupations, have changed jobs more often, fewer receive higher work ratings, and more receive lower work ratings. 4) Anti-social behavior: significantly more morons had court records. 5) Social participation and leisure-time activity: more non-morons participated in more social activities and engaged in more leisure time activities, such as reading, then did morons.

Kennedy, R.J.R. A connecticut Community Revisited: A Study of the Social Adjustment of a Group of Mentally Deficient Adults in 1948 and 1960. Connecticut State Dept. of Health, Office of Mental Retardation, Project No. 655, 1966.

This is a follow-up of Kennedy's 1948 study. The intent was to determine how effectively the mentally retarded subjects of the earlier study had been functioning in the 12 year interval in comparison with a control group of normals. Attention focused on three aspects of behavior, personal, social and economic. The following findings are reported. 1) Employment: almost three-fourths of both groups had only one or two jobs over the 12 year period. Among defectives, women changed jobs more often and among controls, men changed jobs more often. 2) Economic status: more controls owned their own car, had savings accounts, and had telephones. There was no significant difference between groups as far as residing in upper, middle, or lower class housing areas. 3) Personal adjustment: no significant differences in marital status, age at marriage, or number of children, although more controls had been divorced or separated. 4) Offspring: no significant difference in I.Q. of children between groups; however, the children of the morons were more academically retarded than control's children. 5) Social adjustment: more defectives had more trouble with police, but differences were not significant. Reading habits of controls were significantly different from those of defectives. Significantly more controls than defectives voted and the difference was greater in 1960 than in 1948.

Krishef, C. and Hall, M. Employment of the mentally retarded in Hennepin County, Minnesota. Amer. J. Ment. Def., 1955, 60, 182-189.

A follow-up of 177 retarded adults, employed part or full-time, with a detailed analysis of 153 economic, social and work histories, test scores, institutional histories, and other background factors, Findings: a comparison of high and low I.Q.'s(above and below I.Q. 60) showed no difference in males. Among females, significant differences occurred in occupational classification with only members of the high group holding jobs as general maid, waitress, counter-girl, etc.; the low group worked as bus-girl, dishwasher, etc. The majority found their own jobs, satisfied with employment, they held jobs from one to ten years.

Laing, J.K. Some aspects of placing defectives in work. Mental Health, London, 1959, 18, 56-59.

A description of incidents in the work placement of mental defectives trained at a British institution(1939-1953).

Lambert, J. and Racine, H. Considerations on placement and employment of the mentally deficient. Canad. Psychiat. Assn. J., 1959, 4, 107-119.

Placement criteria: job selection, work habits, personality, health, appearance, and employment records. Of 37 defective boys discharged from Mount St. Aubert, Quebec, 56.7% made excellent adaptation, 14.4% fair, 28.9% poor.

Lauber, Ellyn G. The vocational placement of a mentally retarded boy: a case history. Train. Sch. Bull., 1955, 52, 43-49.

Case history of a retarded boy who was kept at home. Shows effects of deprivation in poor social relationships.

Lee, J.L., Hegge, T.G. and Voelker, P.H. A Study of Social Adequacy and of Social Failure of Mentally Retarded Youth in Wayne County. Michigan: Wayne State University, 1959.

Two hundred from Wayne County Training School, 200 from public school special education classes were compared with 100 normals. Retarded in both groups were indentified late(50% over CA-10) had more uncorrected physical defects than normals, poorer social and occupational adjustment, higher rates of illegitimate pregnancies.

Levy, S. The role of mental deficiency in the causation of criminal behavior. Amer. J. Ment. Def., 1954, 58, 455-464.

From a study carried out at the Washington State Penitentiary in Walla Walla, Washington, it was concluded that mental deficiency does not play an important part in the causation of criminal behavior. Out of 1610 inmates 17 had I.Q.'s below 70. Of these, 14 were Negro, 2 white and 1 Mexican. It was concluded that unstable backgrounds, and not mental deficiency, led to criminal behavior in these 17 individuals; since 16 came from broken homes and since none had a stable marriage.

Loos, F.M. and Tizard, J. The employment of adult imbeciles in a hospital workshop. Amer. J. Ment. Def., 1955, 59, 395-403.

A British study on the ability of young adult imbeciles of medium grade who are not psychotic, seriously disturbed or crippled, to do a simple industrial job(assembling cardboard cake boxes) with sufficient care and skill to make possible their employment on it. They were able to do the simple job satisfactorily; however, they did not work consistently. They were most effective when they worked as members of small groups in which their production was related to that of high-grade patients with whom they worked on terms of equality.

Louisiana Youth Commission and Tulane Univ. School of Social Work. Social and Econ. Adjustment of Mentally Retarded Individuals. Baton Rouge, 1954.

A study of family, community, economic and marital adjustment of 111 mental retardates in Orleans Parish, Louisiana. Criteria of adjustment: self-sufficiency, acceptance of responsibility, community activity work histories and marital record. 75% learned to care for personal needs and shared home responsibility. Only 7 had conflict with civil authorities. Only 12 participated in any group recreational activities. Church attendance was the most frequent community activity. 74 had never been employed and of those employed 26 were unskilled. 16 were married and all children of these marriages attended school with no apparent known difficulties.

Macmillan, M.B. Adjustment and process: a neglected feature of follow-up studies of retarded people. Amer. J. Ment. Def., 1962, 67, 418-423.

A survey of 126 mentally retarded children who left the Special School at the Children's Cottages(Victoria, Australia) 1951-1957, showed that only 18 hadn't been admitted to a mental hospital by 1961, the author concludes that community adjustment is a time consuming process operating in the context of the facilities and attitudes of the community; and that community adjustment should begin at the point where retardation is first recognized and not at the point where the parents have given up and wish to institutionalize the child.

McKeon, Rebecca M. Comparative follow-up study of mentally handicapped youth who have attended special classes in six large industrial communities. Microfilm. Unpublished Doctoral Dissertation. Boston Univ., 1948.

A follow-up study to investigate the effectiveness of special classes for 350 mentally handicapped subjects(I.Q.: 50-90; CA: 17-27: number of years out of school: 1-10 years) who were selected from seven schools(25 boys and 25 girls were selected from each school). The critical ratio technique was used. Measuring instruments were: 1) "A Scale for Rating Elementary School Practices" University of the State of New York. Albany, N.Y., 1936. 2) Follow-up questionnaire: data were obtained from school records, personal interviews with subjects and employer, and law and service agencies. 3) Socio-economic status of home determined by using Sim's Score Card. Encouraging findings were: 1) there are definite types of work available for the mentally retarded; 2) most of the subjects had found employment; 3) more than 40% were self-supporting; 4) most did not become delinquent; 5) some schools are actively interested in these students. Discouraging findings: 1) adequate measures of academic achievement for these students are not available in all schools; 2) these subjects experience difficulty in finding their first job and many have long periods of idle time; 3) some schools do not have adequate vocational adjustment training and 4) these subjects have developed few habits that make for worthy leisure time activity.

McKeon, R.M. Mentally retarded boys in wartime. Mental Hygiene, 1946, 30, 47-55.

A follow-up study with particular emphasis on military service of 210 mentally retarded boys(I.Q.: 52-83; CA: 16-27) who had attended special classes. Results were: 1) 113 of 210 were in active service; 2) 20 of 39 rejected were classified as mentally or educationally inadequate; 3) one-fifth of the group had been employed 100% of the time; 4) 77% were employed at least 50% of the possible time; 5) 25% had appeared in court. The main conclusion drawn was that this was found to be a self-respecting group who responded in creditable fashion to the war emergency.

Magleby, F.L., McPhee, W.M. and Thackery, M.G. Vocational and social adjustments of rehabilitants with mental disabilities. Mental Hygiene, 1963, 47, 117-122.

The fifty-eight rehabilitants with mental disabilities included mental defectives who were not treated separately. Adjustment of the group was reported satisfactory with criteria based on employment status, marital status, and ratings by professional social workers. Variables related to adjustment were good health, sex and marital status.

Miller, E.L. Ability and Social Adjustment at Mid-life of Persons Earlier Judged Mentally Deficient. Dissert. Abstr., 1962, 23.

An investigation of the economic and social adjustment of mentally deficient subjects originally studied by Baller(1935) and re-evaluated by Charles(1950). 146 of the original group of mental retardates and 120 of the original controls were located and consented to participate. Parameters and measures were the same as in Charles' study. Eleven years after the first study the retarded subjects had become even more stable socially and economically with exception of a higher divorce rate, and limited social and public service participation. Economically and physically the controls fared better.

Morris, J.V. Delinquent defectives, a group study. Amer. J. Ment. Def., 1948, 52, 345-369.

A case history investigation of all defective delinquent patients in the records of Norfolk County institutions(England). Of the 112 cases, 55% came from dull, defective or psychotic parents. Offenses: 43% sexual, 27% larceny.

Mullen, Frances A. Mentally retarded youth find jobs. Personnel Guid. J. 1952, 31, 20-25.

Vocational follow-up study of 280 mentally retarded special class pupils. 15% were found to be unemployed. Negro boys and girls were found to have more difficulty in achieving vocational adjustment.

Neff, W.S. The Success of a Rehabilitation Program: A Follow-up Study of Clients of the Vocational Adjustment Center. Monograph No. 3, The Jewish Vocational Service, Chicago, Ill., 1957.

Follow-up study of 217 graduates of the Vocational Adjustment Center of the Chicago Jewish Vocational Service. All clients were handicapped by some disabling condition, mental, emotional, physical or in combination. Interviews gathered information on the post-VAC employment histories as well as relevant personal and social information. 68% of this group, classed unemployable by referring agencies, were placed on jobs after leaving the VAC. Neither age, nature of disability or previous employment experience influenced the rehabilitation. The supporting or impeding attitude of the family to the client was considered a factor in vocational adjustment.

Nicholson, W.R. The employment of the handicapped school leaver. Rehabilitation. Dundee, Scot., 1960, 35, 27-33, 55.

A report of placement records of physically and mentally handicapped pupils from Fairmier Special School, Dundee, Scotland. Factors contributing to acceptance at work, administration of the training and placement program and data on recent employment investigations were discussed.

O'Brian, Margaret. A vocational study of a group of institutionalized persons. Amer. J. Ment. Def., 1952, 57, 56.

A study of factors facilitating and impeding vocational adjustment of 20 mental retardates institutionalized at least one year. Factors facilitating were rate and thoroughness of work, attitude of employers, personality traits of employee and in the case of marriage, the ability of women to take physical care of children. Factors found to impede vocational adjustment were limited institutional work experience, personality traits and anti-social behavior of employee.

O'Connor, N. Defectives working in the community. Amer. J. Ment. Def., 1954, 59, 173-180.

A study of the records of 104 British institutionalized high-grade defectives employed as laborers outside the hospital. Work records were compared with regular laborers who worked with the defectives. Defectives were as successful as hired workers after initial difficulties were overcome. After first year there was no difference in number of dismissals from either group. Job success was related to conditions of supervision, incentive, home conditions and instability. No relationship was found between I.Q. and failure. Failures were behavior problems.

O'Connor, N. The occupational success of feebleminded adolescents. Occup. Psych., 1953, 27, 157-163.

A discussion of the capabilities of borderline adolescents as compared to normals in performance of unskilled factory work in Great Britain. Evidence is cited of hospital patients who, when placed in a factory with normals doing unskilled jobs, often equaled or surpassed the production of normals.

Parnicky, J.J. and Brown, L.N. Introducing institutionalized retardates to the community. Social Work., 9, (1), 1964.

Study of reactions of eight educable, late adolescent males introduced to work and social experience in the community while remaining in residence at the Johnston Training and Research Center, New Jersey preparatory to placement. The authors conclude that the solution for successful community adjustment lies in making community life more desirable than institutional life, not in making the institution an undesirable, unhappy experience.

Peckham, R. Problems in job adjustment of the mentally retarded. Amer. J. Ment. Def., 1951, 56, 448-453.

A follow-up study of 80 mental retardates to determine factors contributing to poor adjustment. Lack of acceptance by fellow workers, lack of sophistication, inadequate salary, inability to budget, lack of initiative, improper perspectives of capabilities and goals, and inadequate family encouragement were associated with poor adjustment.

Peterson, L. and Smith, L.L. A comparison of the post-school adjustment of educable mentally retarded adults with that of adults of normal intelligence. Except. Child., 1960, 26, 404-408.

An investigation of post-school adjustment of 45 adults who attended special classes for mentally retarded with 45 adults who were of low economic status while attending secondary school. Conclusions stated that the mentally retarded group did not find jobs immediately upon leaving school and changed jobs twice as frequently as the comparison group. They married less frequently and lived in substandard homes.

Phelps, H.R. Post-school adjustment of mentally retarded children in selected Ohio cities. Except. Child., 1956, 23, 58-62, 91.

Subjects were 105 males, 58 females, graduates of special classes. Factors found to be related to successful adjustment were I.Q. level, work efficiency and general behavior.

Porter, R.B. and Millazzo, T. A comparison of mentally retarded adults who attended regular School classes. Except. Child., 1958, 24(9), 410.

An investigation of post-school adjustment of mentally retarded children who had been enrolled in special classes with another group of mentally retarded enrolled in regular classes. Adjustment tended to favor those enrolled in special classes with the greatest differences manifest in employment rates. 75% of the special class group were self-supporting as compared to 17% of the regular class group.

Potts, Jane H. Vocational rehabilitation for the mentally retarded in Michigan. Amer. J. Ment. Def., 1952, 57, 297-320.

A follow-up of the vocational rehabilitation of 22 institutional mental retardates at the Michigan Vocational Rehabilitation Agency. Thirteen were still employed and well adjusted, three were not steadily employed, three were failures and three had left the community. Comparing the adjustment of these subjects to 168 cases who had not been institutionalized and whose files were closed as "rehabilitated," it was found that proportionally more of the institutional cases were still employed and adjusted.

Reynolds, M.C. and Stunkard, C.L. A Comparative Study of Day Class vs. Institutionalized Educable Retardates. Minneapolis, Minn. Cooperative Research, Project No. 192, College of Educ., Univ. of Minnesota, 1960.

Two major objectives of this study were: 1) to provide improved means for predicting the adult status of educable retarded children, and 2) to contrast conditions associated with education and care of these children in institutions and public school classes. In the predictive study, of the 409 former patients of the Owatonna State School, 55% had made an acceptable community adjustment seven years after discharge. Factors formerly believed to be indices of success of adjustment did not yield useful predictions: sex, stability of home situations in early life, type of retardation and history of delinquency. Factors found to be predictive of long-range adjustment: I.Q., age at time of institutionalization, and extent of physical handicap. The Comparative Study of 173 Special Class pupils and 158 institutional cases yielded no significant differences between groups but suggested the need for study of sex differences.

Saenger, Gerhart. The Adjustment of Severely Retarded Adults in the Community. A Report. Albany, New York, October, 1957.

The project was undertaken in order to find out how severely retarded adults performed in all aspects of their daily lives, how they contributed to it, and the problems they posed to family and community. Characteristics of those staying at home and those institutionalized were compared, adjustment being concerned with characteristics of the retarded and the family. The following areas were explored: 1) characteristics of the severely retarded and their families, 2) institutionalization, 3) home adjustment, 4) community adjustment, 5) vocational adjustment, 6) use of community resources, and 7) planning for the future. The total census consisted of 520 adults between 17 and 40 years of age, generally within the I.Q. range of 40 to 50, but with some below and some above. Most parents had made plans to keep their child in the community; only 20% considered institutionalization.

Satter, G. and McGee, E. Retarded adults who have developed beyond expectation - Part I: Intellectual functions. Training School Bulletin, 1954, 51, 43-55.

A comparison of a group of 26 mental defectives who had shown development beyond expectation at the time of their admission at Vineland Training School in New Jersey as compared with another group of 26 mental defectives who had not shown this development. This unexpected development was characterized by renewed growth of mental ages, leadership qualities, atypical social development, superior vocational performance and breadth of vocational interest and ability. The groups were matched in size, age, and I.Q. at time of admission; length of residence and etiological background. Differences existed between the two groups in verbal competence, thus it was believed the superior developers were better able to cope with social adaptation due to greater facility of language capabilities. Analysis of Binet Scores on admission to Training School showed more scatter in the "developers."

Satter, G. and McGee, E. Retarded adults who have developed beyond expectation - Part II: Non- intellectual functions. Train. Sch. Bull., 1954, 51, 67-81.

Comparison of non-intellectual functions in the two groups reported in the previous study. The groups were compared in performances on an object sorting test, a level of aspiration test, the Bender-Gestalt and the H-T-P. The superior developers consistently exhibited a higher level of maturity on all functions investigated.

Satter, G. Retarded adults who have developed beyond expectation - Part III: Further analysis and summary. Train. Sch. Bull., 1955, 51, 237-243.

A factor analysis of 27 variables which were found to discriminate between the 26 mentally retarded individuals who had developed beyond expectation and 26 non-developers. While the variables appeared to cover a variety of functions, they all emerged from the analysis as segments of intelligence and no differences in motivation, attitude, or in work habits emerged as explanatory principles.

Schmidt, B.G. Changes in personal, social, and intellectual behavior of children originally classified as feebleminded. Psych. Monog., 1946, No. 5, 60, 1-144.

Changes in personal, social and intellectual behavior of 254 children originally classified as feebleminded(I.Q. 27-69) who five years earlier had completed a special three year educational program. Post-school adjustment was marked by 83.4% regularly employed; 59.7% now classified in low-normal range of intelligence; 26.7% classified as dull and 7.2% still considered feebleminded. Changes were not as marked when average adjustment of this group was compared to the average adult control group.

Shaw, C.H. and Wright, C.H. The married mental defective: a follow-up study. Lancet, 1960, 1, 273-274.

A follow-up of 120 men and 122 women mental defectives who were married in Sheffield, England. 20% of the marriages had ended in divorce or separation, or were otherwise unsatisfactory. 32% were well adjusted leading happy normal lives; 48% were marginal. Small families with one or two children were more successful than large families. Forty-four families showed poor child care, usually associated with unsatisfactory childhood background in parent. About 50% of all cases had been discharged from statuatory supervision.

Stanley, R.J. Appendix to Minutes of Evidence Royal Commission of the Law Relating to Mental Illness and Mental Deficiency. 1957, Great Britain.

In this analysis of 84 patients withdrawn from license during 1949-1952, 52% were withdrawn as a result of character defects with relevant factors: 41% temperamental, 24% lack of maturity, 17% environmental, 11% innate lack of intelligence and 7% inadequacy at work.

Stanley, R.J. and Gunzburg, H.C. A survey of residential licenses from a mental deficiency hospital. Int. J. Soc. Psychiat., 1956, 2, 207-213.

Analysis of 204 releases on residential license from a mental deficiency hospital in England. The main cause of failure was found to be temperamental and emotional disturbance.

Strickland, C.G. Job training placement for retarded youth. Except. Child. 1964, 31, 83-86.

In a survey to determine the types of jobs assigned to 436 educable retarded youth during the school's program of on-the-job training showed: 21% hotel and restaurant, 17% retail trade occupation, 13% auto services, 10% personnel service and 8% domestic service. Altogether placements were made to 35 different jobs in ten categories.

Tarjan, G., Dingham, J.F., Eyman, R.K. and Brown, S.J. Effectiveness of hospital release programs. Amer. J. Ment. Def., 1960, 64, 609-617.

A study of all patients leaving the Pacific State Hospital, Pomona, California for indefinite leaves, unauthorized absences and direct discharges between 1952 and 1956. The report deals with instances of releases, their duration and the character of the patients involved as followed over 700 days. Male patients of a higher age, of a lesser degree of deficiency and with a diagnosis of familial or undifferentiated were most likely to be placed on leave. Patients with a diagnosis of Mongolism, generally of a younger age and of a moderate degree of deficiency, represented a large segment of those placed in family care. Success of releases varied, with the type on home leave of longest duration and unauthorized absence of shortest duration. Sex, age, diagnosis and I.Q. did not greatly influence the probability of the release remaining in effect for 700 days.

Tisdall, W.J. A follow-up study of trainable mentally handicapped children in Illinois. Amer. J. Ment. Def., 1960, 65, 11-16.

Follow-up study of 126 children who, five years previously, were enrolled in special public school classes for the trainable mentally handicapped. 25% were found to be at home, 24% were still in special classes, 18% were in private parent-sponsored classes, with the remainder of the sample in institutions, sheltered workshops, and classes for the educable mentally handicapped.

Tong, J.E. and Mackay, G.W. A statistical follow-up of mental defectives of dangerous or violent propensities. Brit. J. Delin., 1959, 9, 276-285.

A statistical follow-up of two groups of male defectives, those(N=171) who had suffered relapses and had to be returned to the hospital or convicted of offenses and those(N=416) who had no relapses. In all cases length of time spent in the hospital was more related to success than age at removal from hospital. Comparisons between the two groups revealed that some transitional stage between hospital and community was significantly effective in preventing relapses. Comparisons of 50 matched pairs showed that of the relapse group significantly more had incidents of violence, attempted escapes, and incidents of anti-social behavior than the non-relapse group. Heterosexual and homosexual disorders did not differ significantly. In general, pre-admission history of heterosexual and violence disorders,associated with favorable prognosis, history of larceny with poor prognosis.

Vocational Rehabilitation Administration. The Rehabilitated Mentally Retarded. U.S. Dept. of Health, Educ. and Welfare. Washington, D.C.(Superintendent of Documents, U.S. Gov't Printing Office), 1964, 30.

A report on 7000 mentally retarded persons rehabilitated in fiscal year 1963: Part I, characteristics of 5,909 rehabilitants with mental retardation as the major disabling condition; Part II, characteristics of 1,152 rehabilitants with some other major disabling condition but with mental retardation as a secondary disability. The data source was the Closed Case Record, Vocational Rehabilitation Administration Form R-300. Rehabilitated were described by age, sex, race, dependents, mobility status, referral source, earnings, work status and occupation at closure.

Weaver, T.R. The incidence of maladjustment among mental defectives in military environment. Amer. J. Ment. Def., 1946, 51, 238-246.

The incidence of maladjustment of mental defectives in military service was found to be lower than expected, suggestive that peace time society and industry could find the mental defective useful under similarly structured conditions.

Windle, C. and Dingman, H.G. The front and back doors of a hospital for mental defectives. Train. Sch. Bull., 1959, 56, 8-14.

Investigation of characteristics of patients who had taken authorized and unauthorized leaves from the Pacific State Hospital. 63% of patients taking unauthorized absences returned to hospital or jail compared to 4% of patients on home or work leaves. Patients taking unauthorized absences tended to be male, to be young, to have had previous unauthorized absences. Patients released on work leaves tended to be older, to have been hospitalized longer, to be female and to have relatively good prognosis.

Windle, C.D., Stewart, E. and Brown, S.J. Reasons for community failure of retarded patients. Amer. J. Ment. Def., 1961, 66, 213-217.

Four year study of failure in community adjustment of three groups of mentally retarded patients: 48 patients on vocational release; 84 on home release and 64 on family care leave. Failures on vocational leave were most frequently manifested in inadequate work performance, inadequate interpersonal relations and voluntary departure from the institution. Patients on home leave tended to fail for reasons of anti-social behavior. Patients on family care tended to fail because of environmental lack of support, poor health, or intolerable behavior.

Wolfson, I.N. Follow-up study of 92 male and 131 female patients who were discharged from Newark State School in 1946. Amer. J. Ment. Def., 1956, 61, 224-238.

A study of 92 males and 131 females five to seven years after discharge from Newark State School. The criteria of adjustment were: A) good continuous adjustment, independent, no need of supervision or record of difficulties(M=17 and F=38); B) satisfactory continuous adjustment not entierely independent, living with parents(M=19 and F=34); C) temporary misconduct, difficulties requiring return to school or institution(M=10 and F=8); D) serious maladjustment, personality disorder or mental illness(M=10 and F=7); and not located (M=3 and F=12). It was found that more members of classification A were living in foster homes and orphanages before admission to school having come from poor, unstable families. No relationship between: age of admission, length of institutionalization and adjustment; adjustment and reasons for admission; or I.Q. and adjustment. Those who left school under a planned program had better success records.

IV. THE MEASUREMENT OF PERSONAL VARIABLES

Allen, Mary L. A study of the vocational orientation of institutionalized adolescent mentally defective girls. Amer. J. Ment. Def., 1942, 46, 485-495.

The vocational orientation of 45 institutionalized adolescent mentally defective girls is reviewed. A rating scale of vocational orientation was constructed to evaluate orientation. Statistical data was not presented. The results reported that only four girls named vocations beyond their mental ability and possible educational achievement level. Most girls were aware of their skill limitations, required job attitudes and salaries to be expected. However, most of the girls were poorly oriented in the awareness of adequate plans for meeting vocational demands, social activities and community life. Orientation in all areas improved with age.

Arbitman, H.D. Rorschach determinants in mentally defective and normal subjects. Train. Sch. Bull., 1953, 50, 143-151.

Comparison of 50 mental retardates(CA 7-14) grouped as low, medium and high MA and 50 subjects of normal intelligence on the Rorschach. The following determinants were found to be related to MA: D; D%(non-linear r); FM(neg.); H (non-linear). In non-linear relationships the low and high MA groups had fewer determinants than the middle MA group.

Avila, D.L. and Lawson, J.R. The TAT as a diagnostic tool with retarded adults. Percept. Motor Skills, 1962, 15, 323-325.

A study of the diagnostic value of the TAT with retarded adults, 15 male and 9 female. TAT stories were evaluated in terms of quantity and quality of response. No significant relationship was found between stories and age, sex or verbal performance or Full Scale I.Q. The authors concluded that TAT was of limited value with retarded adults because the stories were too short and lacking in content. One-third of the responses to the cards could not be considered stories.

Barclay, A., Goulet, L.R. and Sharp, A.R. Short-term changes in intellectual and social maturity of young non-institutionalized retardates. In: Oster, J.(ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

An analysis of mental age and intelligence changes as well as social age and social quotient changes. Subjects were 20 male and 16 female caucasian retarded children, without respect to sex, age or etiology. Stanford-Binet and Vineland Social Maturity Scale were used. Maturational status as reflected by chronological age accounted for most of the changes observed in intellectual maturity, but simple chronological age increases could not entirely account for changes in the level of social maturity. Both intellectual and social maturity increased at a rate disproportionate to corresponding chronological age increases.

Barrett, A.M., Relos, R. and Eisele, Jack. Vocational success and attitudes of mentally retarded toward work and money. Amer. J. Ment. Def., 1965, 70(1), 102- 107.

Two groups of mentally retarded individuals, composed of subgroups at four different institutions in the United States, and equated relatively as to I.Q., age, and educational background were examined with 20 items designed to reveal differences between the groups on attitudes toward work and the use of money. One group of 58 individuals was designated as vocationally successful by certain defined criteria and the second group of 57 was classified as vocationally unsuccessful. Items were presented individually and orally. Results showed that the successful group differed from the unsuccessful on items that emphasized abstractive thinking.

Baumeister, A.A. Use of the WISC with mental retardates: a review. Amer. J. Ment. Def., 1964, 69, 183-204.

A review of studies on the use of the WISC with mental retardates. When the WISC is administered to low-functioning individuals certain difficulties are presented such as the limitation of the range of I.Q. scores and reduced reliability toward the lower end of the distribution. For less retarded individuals WISC I.Q.'s appear to be acceptably stable and reliable. On the basis of WISC scores one can predict achievement, probably verbal and manual learning and the Stanford-Binet I.Q. The author stated that little enthusiasm can be engendered for the WISC as a diagnostic instrument. It appears in general that cultural-familial, undifferentiated retardates score higher on the Performance than on the Verbal Scale. Brain-damaged subjects appear to perform more evenly across the two scales. More specific pattern analysis, founded on variability among subtests, appears futile. Factor analytic studies suggest that retardates and normals perform qualitatively differently on the WISC.

Beck, S.J. The Rorschach test as applied to a feebleminded group. Arch. Psychol. No. 136, 84, 1932.

Study of the use of the Rorschach test as a means by which the non-intellectual components of the personalities of 87 feebleminded children could be evaluated. The test was found to be useful in discrimination between levels of mental development(W% and F+%). Beck felt a composite picture of the mental defective's personality was measured by the Rorschach. None of the correlations were high enough to conclude that any determinant would be a satisfactory predictor of MA.

Beckham, J.J. Minimum intelligence levels for several occupations. Person. J., 1930, 9, 309-313.

The findings of several practical investigations of minimum occupational intelligence levels are summarized. Conclusions were: 1) individuals with an eight year mental age level are capable of high-grade domestic work; 2) individuals with mental age of 10 to 12 are capable of handling responsibility and supervision; and 3) higher intelligence is found in those classified as excellent workers than in those given lower ratings. Little difference in intelligence between good, fair and poor workers was found.

Benton, A.L. Current status of the Rorschach test. 2. The Rorschach and diagnosis of cerebral pathology in children. Amer. J. Orthopsychiat., 1956, 26, 783-790.

A review of literature on the application of the Rorschach to the diagnostic problem of cerebral pathology in children. The review covered five areas: 1) what in Rorschach performance can be considered characteristic of mental deficiency; 2) whether Rorschach can differentiate between etiological types of mental deficiency; 3) whether Rorschach can discriminate the "pseudo-feebleminded"; 4) what features of Rorschach permit inferences of organicity in a non-defective child; and 5) what features of Rorschach provide valid information about personal adjustment of the cerebrally impaired child. Implications drawn from the review were: 1) studies of performance of mentally defective children indicate certain group trends; however, individual variability is so great that it would not be accurate to speak of a characteristic performance pattern; 2) there are insufficient empirical data to indicate whether homogeneous "types" of mental deficiency show characteristic performance patterns; 3) there are insufficient data to indicate whether children who are retarded by reason of emotional disturbance can be discriminated by means of the test from other types of retarded children; 4) case studies disclose an apparent diversity of performance patterns in non-defective, brain-injured children, and 5) the few studies which have attempted to relate Rorshcach performance to personal adjustment in the mental defective have for the most part not supported one another.

Benton, A.L. Right-Left Discrimination and Finger Localization. Harper and Row, 1959.

A comparison study of right-left discrimination and finger localization of 110 mentally deficient subjects grouped according to brain damage, familial and undifferentiated. Scores on the right-left discrimination battery did not discriminate the three groups. After matching the mental retards with normal children on MA, it was found that the mental retards' performance was significantly and consistently inferior. The finger localization did not discriminate the three types of mental deficiency. Normals' performance was sigfiicantly better than the mental retards' performance which was more variable.

Benton, A.L. and McGavern, Musetta. Qualitative aspects of visual memory test performance in mental defectives. Amer. J. Ment. Def., 1962, 66, 878-883.

Study to determine whether, when over-all level of performance was controlled, the reproduction of visual designs from memory which were made by defectives differed qualitatively from those made by normal children. When performance of the two groups were compared in terms of six major types of errors(omissions, distortions, perseverations, rotations, misplacements, size) it was found that they differed in only one respect - the defectives made many more size errors than did the normal children. This finding was felt to be evidence pointing to the similarity which exists between these defectives and patients with acquired cerebral disease.

Berman, Issac and Rhone, Doris Ellen. Wechsler scores vs. Piaget levels: cognitive efficiency of institutionalized retardates.(Abstract). Calif. Ment. Health Research Digest, 1964, 2(4), 18.

This study attempted to determine whether sub-average intelligence scores might sometimes be a consequence of severe emotional disturbance. Two groups, of 18 high-grade institutional retardates each, were used, one rated as high and the other as low in intellectual ability. The principal hypotheses tested were: 1) the intellectual capacity of mental retardates is more meaningfully revealed by Piaget's type of test than by a conventional intelligence test; 2) the high functional group, being more efficient in everyday behavior, would excel the low group on the Piaget test of conservation despite no differences between the groups on the Wechsler test; and 3) due to emotional disturbances, institutionalized low functional retardates would show more signs of maladjustment than high functional retardates. Statistical analysis revealed failure to confirm the first,2 principal hypotheses; however, the third hypothesis was confirmed. The Piaget type of test shows promise as a diagnostic tool, but needs modifications to enhance usefulness and increase validity. This study indicated the importance of considering personality factors in high grade retardation with specific reference to social adjustment.

Bierman, Arthur. A cooperative vocational pattern for in-school mentally retarded youth. Progress Report 3, Occupational Center of Essex County, Inc., Newark, N. J., 1965.

Each year this project includes 100 mentally retarded students in special classes. The experimental group(50 subjects) is evaluated and spends two afternoons a week in a workshop; whereas the control group(50 subjects) is evaluated and continues only regular classes. Each year a follow-up is made of subjects who were included in the project. In 1964 the experimental group consisted of 100 subjects and the control group of 100 subjects. In an effort to determine the predictive value of the test battery used in evaluations a factor analysis was run on 51 variables. The variables fell into six factors: 1) work attitude and knowledge; 2) speed; 3) work related reading and writing; 4) manual dexterity; 5) accuracy; and 6) social awareness. The test battery was reduced to include only 40 variables and an attempt will be made to determine its predictive value as data from the following studies is received.

Bijou, S.W. Measurement of Adjustment by Psychometric Pattern Techniques. Amer. J. Orthopsychiatry, 1942, 12, 435-439.

A review and discussion of studies by Jastak and Bijou of the measurement of adjustment by psychometric pattern technique. For example, behavior efficiency may be measured by disparity between a performance scale scored for time, accuracy, and relevancy, and a test measuring height of attainment, disregarding efficiency.

Bijou, S.W. and McCandless, B.R. An approach to a more comprehensive analysis of mentally retarded pre-delinquent boys. Jour. Genet. Psychol., 1944, 65, 147-160.

An attempt to differentiate and integrate personality traits felt to be co-determined by heredity and environment in 454 socially unacceptable pre-delinquent boys of the Wayne County Training School(CA=8-16; mean Binet I.Q.=69, range 50-89; 80% white; 20% negro; 24% had foreign parents). Four concepts were analyzed: 1) functional intelligence(Stanford-Binet); 2) latent intelligence(I.Q. minus behavior efficiency and verbal learning interference); 3) behavior efficiency(Army Performance Scale or Grace Arthur plus Stanford-Binet verbal power test); and 4) verbal learning interference(factor describing verbal and reading retardation in subjects with adequate learning ability in non-verbal tests). The boys were divided into three performance groups according to Grace Arthur Performance Scale tests; the performance criteria being the above mentioned concepts: Group I, low, 13%; Group 2, high, 27%; and Group 3, even pattern group, 60%. Despite comparable functional intelligence, boys with higher behavioral efficiency made better institutional and post-institutional adjustment and boys with high verbal learning interference were inferior in reading achievement to those with low interference.

Blackman, L.S. and Kahn, Harris. Success and failure as determinants of aspiration shifts in retardates and normals. *Amer. J. Ment. Def.*, 1963, *67*, 751-755.

This study evaluated the effects of equal magnitudes of experimentally controlled success and failure experience of the Aspiration Shifts of 48 educable mentally retarded adolescents at Edward R. Johnston Training and Research Center(CA=18.11, range of 15.8 to 22, I.Q.=66.15, range of 61.3 to 68.4) and a control group of normals(equal CA). Of the three independent variables of: 1) normal vs. retarded, 2) male vs. female, and 3) success vs. failure, only the latter yielded significant differences in mean Aspirational Shifts. Retardates were more variable in goal setting behavior than normals and when compared on a measure of realism, they were again significantly more variable, but mean scores did not differ significantly from those of normals.

Blodgett, Harriet E. Clinical evaluation of the adolescent retardate. *Int. Rec. Med.*, 1961, *174*, 150-155.

Pertinent factors are discussed which should be considered in the predictive assessment of the adolescent retardate. Evaluation of the adolescent is composed of several elements representing both measurement and judgment. Measurement is possible in the areas of ability, ability patterning, achievement; judgment is necessary in the areas of social skills, attitudes, patterns of emotional expression. Evaluation should also include consideration of the effect of past experience on present adjustment, particularly the influences of home and parental attitudes and practices and those of previous school experiences.

Bobby Dodd Workshop, The. The Atlanta Occupational Center for Mentally Retarded - Progress Report on Demonstration Project RD 531, Atlanta, Georgia, 1964.

Compares 25 successful placements with 25 dropouts from the training program. The successful group had significantly higher scores on the WAIS Performance Scale, WAIS Full Scale, Arithmetic section of Wide-Range Achievement Test, Railwalking Test, and Pennsylvania Bi-manual Test.

Brower, Judith F. and Brower D. The relation between temporal judgment and social competence in the feebleminded. *Amer. J. Ment. Def.*, 1947, *51*, 619-623.

Twelve endogenous and 13 exogenous retarded were measured on the Vineland Social Maturity Sclae. In both groups there was a relationship between intelligence and time orientation(average correl.=.47). Chronological age played a greater role in determining social competence in exogenous cases. Mental ability exerted greater influence for endogenous cases. Time orientation and estimation appeared to function independently for exogenous cases but there was some overlap for the endogenous group. A non-institutional environment may tend to be more profitable for exogenous cases.

Budoff, M. and Liebowitz, J. Tolerance for stress among institutionalized mildly retarded adolescent. J. Consult. Psych., 1964, 28(4), 333-341.

Nursing personnel rated institutionalized mentally retarded(CA 13-22; I.Q. 55-75) on the two dimensions of good and poor adjustment to dormitory and good and poor control of behavior in dormitory. Four sub-groups[(1) good adjustment, good control; (2) good adjustment, poor control; (3) poor adjustment, good control; (4) poor adjustment, poor control] of ten subjects each were selected and submitted to the mild stress of a mirror tracing task and a severe stress of hand cooling in ice water. On both degrees of stress, subjects rated as having good behavioral control showed less decrement and quicker recovery to stress than those with poor controls; similar findings obtained for those rated well adjusted in the dormitory.

Burg, Billie W. and Barrett, Albert M. Interest testing with the mentally retarded. A bi-sensory approach. Amer. J. Ment. Def., 1965, 69(4), 548-552.

Thirty-nine males and forty female retardates, all in "training toward some goal of occupational adjustment," were given a modification of the Geist Picture Interest Inventory(GPII). The mean CA of males and females respectively were 19 and 23; I.Q.'s were 61.87 and 55.92 for males and females respectively The method of administering the GPII was modified by introducing a verbal description of each picture in accompaniment with the visual presentation. Males obtained mean scores exceeding the "more normal samples in areas of mechanical clerical, outdoor, social service, and dramatic categories;" the mean scores for mechanical and out-door interests were significantly higher for males(p= .001). Females scored significantly higher on persuasive, clerical, and literary categories and tended to score higher on the musical category. It was concluded that the bi-sensory approach elicits interest patterns not too different from those expected in normals. The males and females differed from each other in the culturally expected directions.

Burr, Emily T. Minimum intellectual levels of accomplishment in industry. Personnel Jour., 1924, 3, 207-221.

A discussion of minimum intellectual levels of accomplishment in industry. The correlation of intellectual levels with particular trades is not the only intervening factor to job success. Certain types of jobs may not require a very high intelligence level even though it would appear desirable.

Burr, Emily T. Prime factors in the placement of the below normal. Amer. J. Ment. Def., 1947, 51, 429-434.

A discussion of the Bobcock Mental Efficiency Examination, measuring level of understanding, efficiency with which individuals can function and some personality aspects, in placement of individuals with subnormal intelligence. Job suggestions were made on the basis of these examinations.

Burr, Emily T. The vocational adjustment of mental defectives. Psychol. Clin., 1931, 20, 55-64.

This discussion of the vocational adjustment of mental defectives stresses the attitude that the determination of I.Q. of the defective is not an end in itself but an index to potential adaptability and skill capacity which can be developed through training and must be supplemented by other tests.

Burr, E.T. and Unger, Edna W. Minimum mental age levels of accomplishments; a study of employed girls of low-grade intelligence. Vocational Adjustment Bureau, Albany, Univ. of State of New York, 1931, 108.

An attempt to discover the "lowest mental level" of employed girls who could perform various tasks satisfactorily in order to be retained on the job. Time on the job was the criterion for success. If for a particular job a girl was not able to learn skills within a specified time, she was considered unsuccessful. 2465 jobs were classified and 2649 subjects were employed. The results illustrated that adequate mental age alone was not sufficient for success on a job. The individuals aptitude within her limited mental level should be ascertained as well. Absolute minima were difficult to establish.

Butler, A., Guthrie, G.M. and Gorlow, L. Patterns of self-attitudes of retardates. Amer. J. Ment. Def., 1961, 66, 222.

A 150-item self-attitude questionnaire was developed for use with retarded subjects. Reliability was assessed by retesting 100 subjects. Inverse factor analysis was used to identify groups homogeneous with respect to patterns of self-attitudes. Each factor was a hypothetical organization of self-attitudes. There were three factors representing essentially favorable outlooks and four which were unfavorable.

Cantor, G.N. and Stacy C. L. Manipulative dexterity in mental retardation. Amer. J. Ment. Def., 1951, 56, 401.

Manipulative dexterity was measured by the Purdue Peg Board on 175 mentally retarded, compared to a large sample of normals. Conclusions were: the mentally retarded as a group do not compare favorably with normals in dexterity tasks; manual dexterity in the mentally retarded group is matured by age 14; subjects with I.Q. below 60 generally have a marked inability to perform tasks involving manual dexterity; there was an overlapping of scores of the mentally retarded with higher I.Q.'s and of the normals, indicating many individual mental retardates are capable of performing routine tasks well.

Carleton, F.O., Jr. A comparison of various types of merit rating(employees evaluation) scales for appraisal of the work adjustment of subnormal domestic workers. Dissert. Abstr., 1958, 19, 867-868.

A comparative study of various types of employee evaluation for appraisal of the work adjustment of subnormal domestic workers. In Form I a convalescent care inventory consisting of graphic scales and a behavior check list was administered to employers of domestics from state schools. These responses were compared with work adjustment ratings by social workers and school trainers. Form II was administered to 89 employers and included graphic scales, a check list and forced-choice methods. Comparison of score distributions revealed the usual negative skewness typically encountered in rating studies. Check-list scores showed marked degrees of skewness. Graphic and forced-choice scales tended to have platykurtic score distribution. It is estimated that composite scores provided by as many as three employers would yield a validity coefficient of approximately .70.

Clampitt, R.R. and Charles, D.C. Sociometric status supervisory evaluation of institutionalized mentally deficient children. J. Soc. Psychol., 1956, 44, 222-231

An analysis of the relationship between sociometric status and supervisory evaluation of institutionalized mentally deficient children at Woodward, Iowa State Hospital and School. Sociometric choice and rejection status were secured in relation to three situations: eating, playing and working. Criterion ranking was obtained from ward attendants and nurses in relation to three criteria: relationship with peers and with adults and following directions. A highly significant relationship was found between sociometric status within peer groups and supervisory evaluation based on selected traits. MA and I.Q. appear to be significantly related to the number of sociometric choices received. CA and length of institutionalization were not significantly related to status in the group.

Claridge, G.S. A re-analysis of "excitability " and its relationship with improvement in performance of imbeciles. *J. Ment Def. Res*., 1959, *3*, 116-121.

Analytic study of a rating scale of "excitability" which had been developed to discriminate personality differences in imbeciles. Scores on the rating scale for 155 imbeciles were factor analyzed and two factors extracted, extraversion and neuroticism. Correlations between improvement scores on a repetitive motor task and measures of each of these factors showed that, while extraversion correlated significantly and negatively with improvement neuroticism was uncorrelated with learning measures.

Claridge, G.S. and O'Connor, N. The relationship between incentive, personality type, and improvement in performance of imbeciles. *J. Ment. Def. Res*., 1957, *1*, 16-25.

A study of the differences in personality, conceived in terms of excitability apathy, as a measurement of improvement of performance under either incentive or non-incentive conditions. Institutionalized imbeciles(97 males and 58 females) were tested on rate of learning on Nail Frame Test. Incentive conditions involved encouragement to reach a goal based on previous performance. A rating scale of excitability was developed as the dependent variable. In the non-incentive condition subjects with low excitability scores improved more rapidly than did those with high excitability. Under incentive conditions subjects with high excitability improved more than those with low excitability.

Clarke, A.D.B. and Clarke, A. Cognitive changes in the feebleminded. *Brit. J. Psych*., 1954, *45*, 173-179.

An investigation of I.Q. changes in the feebleminded in relation to changes in environment. Eighteen subjects whose I.Q.'s had changed from -5 to +25 points when retested 18 months after institutionalization(mean increase 9.3 I.Q. points) and a second group of 18 subjects, matched with the first group in age and I.Q. retested three months after institutionalization(mean increase of 4 points). A significant inverse relation between home conditions and increase in I.Q. was found.

Cobb, H.V. Psychological factors in rehabilitation. In: *Work Evaluation and Employment Preparation Services for Mentally Retarded Adults*. Washington, D.C. Goodwill Industries of America, Inc., 1961, 9-16.

A discussion of the development of the mental retardate's self-concept and its influence as one of the crucial determinants of personality, attitudes, goals and judgments in the process of accommodation to life as an adult.

Cohen, J.S. and Rusalem, H. Occupational values of retarded students. Amer. J. Ment. Def., 1964, 69, 54-61.

Occupational values of three groups of subjects: 1) 85 secondary school age students attending the Johnston Training and Research Center in New Jersey; 2) 92 secondary school age students attending special classes for mentally retarded maintained in the public school system; and 3) 99 secondary school students attending regular classes maintained for all students. Occupational values in the three groups seem more dependent upon the pervasive role expectations for retarded boys in our society. The role of expectations of retarded girls was found to be very similar to that of normal girls. Retarded boys differ from non-retarded boys in their emphasis upon job benefits and on a lesser value placed on relations with others and interesting work. Also retarded boys found it difficult to postpone satisfaction and need.

Cowdrey, K.M. Measures of general intelligence as indices of success in trade training. Jour. of Applied Psychol., 1922, VI, 311-330.

A study to determine to what extent the measure of general intelligence of 598 boys at Whittier State School can be used in making specific assignment to a trade. The individual's work was rated by the instructor over a three year period covering a field of 22 different trades. Results indicated that general intelligence influenced trade success during the learning stages in relationship to skill required by the trade and conditions of instruction. In no group was the fact of success wholly dependent on intelligence. Lack of certain degree of intelligence may prevent attainment of a given degree of success.

Cromwell, R.L. A methodological approach to personality research in mental retardation. Amer. J. Ment. Def., 1959, 64, 333-340.

A review of studies undertaken at Peabody College on the generalized expectancy of the mentally retarded. The retarded child was found to have a relatively lowered generalized expectancy for success. In a novel situation, a lowered expectancy level is related to a lowered behavior potential level. Normals were found to have a greater absolute magnitude of change in expectancy level following failure than retardates.

Cutts, R.A. and Sloan, W. Test patterns of adjusted defectives on the Wechsler-Bellevue test. Amer. J. Ment. Def., 1945, 50, 98-101.

Wechsler-Bellevue Test patterns were compared between 50 mentally defective delinquents as described in a previous study(Sloan and Cutts, 1945) and 50 mental defectives who resided in an honors building because of good behavior. Results showed no significant differences in test patterns between the two groups.

Dayan, M. Adaptive behavior and sociometric status among the mentally retarded. Amer. J. Ment. Def., 1964, 68, 599-601.

The Gardner Behavior Chart was used to rate 298 institutionalized mentally retarded individuals and the scores compared with sociometric acceptance and rejection of their peers in their respective cottages. The findings indicate that there is a high agreement with the generalization that individual adaptive behavior is positively and significantly associated with rejection status.

Delp, Harold A. Criteria for vocational training of the mentally retarded; a revised concept of the necessary mental level. Train. Sch. Bull. 1957, 54, 14-20.

An analysis of subjective and objective data on approximately 200 students at the Vineland Training School on the relationships of mental level to vocational training. Results emphasized the necessity of considering personality in vocational training and placement, rather than just "minimum mental level" of a job.

Doll, E.A. Growth studies in Social Competence. Proc. Amer. Assn. Ment. Def., 1939, 44, 90-96.

Comparison of normal and subnormal subjects' responses to the Vineland Social Maturity Scale. Normals were retested from one to three years after the original test at ages up to 30 years. Subnormals were institutionalized, of median age 21 and retested six months to two years after original, The expected rate of development among normals was found; however, there was no development found among subnormals.

Durling, D. The low intelligence quotient as economic index. J. Juv. Res., 1931, 15, 278-287.

Bureau of Mental Health records of 234 mental defectives were analyzed to determine if low I.Q. was an economic index. Results indicated that one person out of 19 with I.Q. less than 40 had been employed. There was no correlation between I.Q. and economic success except as a "negative indicator" that those testing I.Q. below 40 have little chance of securing and keeping employment.

Earl, C.J.C. The performance test behavior of adult morons. Brit. J. Med. Psychol., 1938, 17, 78-92.

An assessment of social adequacy as indicated on performance test scores of adult morons. Kohs Block Design, Alexander's Pass Along, Porteus Maze, and the industrial model of the Kent-Shakow Formboard yielded qualititive data for classification into three categories: 1) excitable; characterized by repetition of error, lack of control over movement and tendency to jump to conclusions; 2) inhibited: characterized by slow, deliberate and perseverant behavior; 3) integrated: performing at near maximum mental level of retention ability.

Erdman, R.L. Vocational choices of adolescent mentally retarded boys. Dissert. Abstr., 1957, 17, 2497.

Vocational choice study of 106 mentally retarded boys. Most jobs chosen were at unskilled or semi-skilled levels. Choices of skilled jobs were unrealistic. Home variables were found to have a stronger influence on choice than school. The amount of time in school programs devoted to various vocational guidance services was minimally related to choice. Indicated needs for developing an effective vocational curriculum: a) means of developing vocational concept of self; b) utilization of variables most influential in vocational choice; c) foster understanding of labor market and its relevance to self.

Ferguson, R.G. Evaluating vocational aptitudes and characteristics of mentally retarded young adults in an industrial agricultural workshop. Amer. J. Ment. Def., 1958, 62, 787-791.

A description of the Sheltered Workshop for mentally retarded young adults at Tampa, Florida. Four objectives of the program were: 1) to develop evaluation techniques for young mentally retarded adults; 2) to develop a training program with realistic vocational objectives; 3) to place subjects in competitive employment or as production workers within the Workshop, and 4) to develop predictive factors from these experiences which will aid in future placement of similar clients. About 60% of the population were males and almost half were between the ages of 16-18 with an MA of 4-12, and I.Q. ranging from 30 to 80 with a mean of 63. Evaluation was based partly on observations and checklists compiled by the staff covering physical status and appearance, basic skills and knowledge, learning abilities, attitudes and adjustments, socialization and behavior, degree of work accomplishment and satisfactions, family environment and possible vocational goals and interests. Information led to individualized training programs. Tests used to assist in the evaluations included: WAIS, Stanford-Binet, MacQuarrie Mechanical Aptitude Test, Purdue Pegboard, Pennsylvania Bimanual, an adaptation of the Minnesota Mechanical Assembly Test. Bender-Gestalt, Rosenzweig Picture Frustration test, Draw-A-Person Test, and similar material. In all evaluations additional tests compiled at the Workshop for this study were utilized. Results and conclusions were not final at the time of the article.

Font, Marion. Some clinical applications of the Rorschach technique in cases of borderline deficiency. Amer. J. Ment. Def., 1950, 54, 507-511.

Three case studies illustrate the importance of the Rorschach technique in differentiating between borderline defectives who have greater intellectual potential and those who are functioning at retarded level because of anxiety.

Francis, Robert J. and Rarick, G. Lawrence. Motor Characteristics of the Mentally Retarded. Government Printing Office, 1960.(OE-35005)

This investigation was concerned with describing certain motor characteristics of mentally retarded children. The subjects included 284 mentally retarded boys and girls in special classes in the public schools of Madison and Milwaukee. A battery of 11 gross motor tests were given to all subjects and observations were made on age and sex trends for each skill tested. In addition, a small sample of 23 institutionalized mentally defective children was tested on six motor performance tests. The evidence seems to indicate that the motor abilities of these children are organized in much the same way as in normal children and that the development of these abilities follows similar developmental curves, although at lower levels than for normal children. For the mentally retarded children studied, the mean on most measures for both boys and girls was 2 to 4 years behind the published age norms of normal children. Furthermore, the discrepancy between the normal and the mentally retarded tended to increase at each successive age level. Although the findings indicate that the poor quality of motor performance was a function of low intelligence, it is possible that factors of motivation and failure to comprehend test instructions may have contributed in part to the low performance scores of the mentally retarded.

Gellman, W. and Glaser, N.M. A scale for evaluating and predicting the employability of vocationally handicapped persons. Chicago Jewish Vocational Service, Chicago, Illinois, Bulletin 7, 1962.

The Scale of Employability for Handicapped persons was constructed at the Chicago Jewish Vocational Service as an instrument for predicting employment outcome for handicapped persons seeking rehabilitation. It is composed of three separate rating scales, each of which consists of a number of subscales and items therein. Each rating scale has its own total score and each scale was analyzed separately. All subjects were persons handicapped by some emotional, mental, or physical disability, who were participating in an eight week rehabilitation workshop program. Counselling and Psychology Scales were filled out prior to the subjects' entry into the workshop. Workshop scales were filled out after 2-4 week diagnostic period, midway through the workshop program and at its conclusion. Three criteria of employment success were: placement within three months, placement within one year, and maintenance of employment for those who were placed in the first three months. Correlations between total scale scores and each of the three criteria varied from .13 to .49. Reliability studies yielded correlations between .50 and .55. The scale was felt to be useful in prediction, but not sufficiently discriminative for individual prediction. A number of elements found to be prognostic of successful employment were: background factors, interview behavior, psychological test performance and behavior in a diagnostic work setting.

Goldschmid, Marcel L. and Domino, George. Some para-diagnostic implications of the I.Q. among mentally retarded patients. Train. Sch. Bull., 1965, 61(4), 178-183.

Two methods of judging the competence of the mentally retarded may be recognized: first, the formal assessment of mental functioning by means of tests, and second, direct observation of everyday behavior as practiced by ward attendants and non-professionals. This study attempted to relate the two approaches. Stanford-Binet I.Q.s of 56 mentally retarded girls were correlated with behavioral descriptions gathered from ward attendants using the Cain-Levine Social Competency Scales and the Sonoma Check List. Patients with higher I.Q.'s were rated significantly higher on the Social Competency Scales; on the Sonoma Check List they were described by specific adjectival clusters having clinical meaning and implications.

Goldstein, Herbert. A pilot study of the effects of sensory-motor training of retarded adults in a sheltered workshop. Progress report to Research Advisory Board of the National Association for Retarded Children, New York.

Gorlow, L., Butler, A. and Gutherie, G.M. Correlates of self-attitudes of retardates. Amer. J. Ment. Def., 1963, 67, 549-555.

An investigation of the self-attitudes of 164 institutionalized female retardates as measured by the Laurelton Self-Attitude Scale, the Social-Value-Need Scale and the Hostility Scale. Scores were related to a wide range of measures in the domains of achievement, early experience, and personality. Small but significant positive relationships were observed between self-acceptance and measures of intelligence, school achievement, success in the institutional training program and success on parole. Retardates separated from parents at an early age expressed more negative self attitudes. There was a tendency for those expressing high degrees of self-acceptance to express less need for the support of others and to accept their own hostility.

Gunzburg, H.C. Social competence of the imbecile child. Landmarks and directed training. In: Oster, J.(ed) International Copenhagen Congress on Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

Temporary and local norms for social skills can be obtained and the diagnosis of weak social skills can be used to further social competence. Based on the

Progress Assessment Chart, an inventory of 100 skills is graded according to difficulty and distributed among four areas of social competence: Self-Help, Communication, Socialization, Occupation. The resulting circular diagram is useful as an easy visual assessment of abilities and disabilities. Samples of non-institutionalized mentally handicapped people were studied. The results point to far less use of the I.Q. and the MA and more attention to Social Age.

Gutherie, G.M., Butler, A. and Gorlow, L. Personality differences between institutionalized and non-institutionalized retardates. *Amer. J. Ment. Def.* 1963, *67*, 543-548.

Three inventories were administered to samples of institutionalized and non-institutionalized retarded female subjects to measure possible personality differences. The groups were matched on age and I.Q., and were comparable with respect to socio-economic background. It was concluded that girls who have been placed in an institution have a much more negative set of self-attitudes than those who remain in their homes. They see themselves as of less value and as more dominated by their own needs. They are less able to acknowledge angry feelings in the face of frustration than are those who have succeeded in the community.

Hamlett, Iona and Engle, T.S. Mental health analysis of furlough patients. *Amer. J. Ment. Def.*, 1950, *55*, 257.

A study of mental health in the successful and unsuccessful adjustment of patients on leave from Fort Wayne State School in Indiana. A Mental Health Analysis, Adult Series. Form A was given to 36 successful and 27 unsuccessful mentally deficient patients. I.Q. testing before and after placement indicated that success or failure could not be accounted for by an increase or decrease in I.Q. Mean scores of patients who had succeeded was higher than those who failed. Significant differences were: freedom from behavioral immaturity; freedom from emotional instability; freedom from feelings of inadequacy; and adequate outlook and goals. Seven questions on the Mental Health Analysis differentiated successful and unsuccessful at a significant level of confidence.

Hollinshead, Merril T. Patterns of social competence in older mental retardates. *Amer. J. Ment. Def.*, 1952, *56*, 603-608.

A discussion of some subjective observations of the Vineland Social Maturity Scale: 1) problems of administration and scoring were not cosidered precise enough; 2) effects of training and life experience were discussed in relation to social maturity; 3) social maturity as measured by the Vineland was not thought to refer to sociality or to personal and social stability in the usual mental-hygiene connotations.

Holman, Portia. The relationship between general mental development and manual dexterity. Brit. J. Psychol., 1933, 23, 279-283.

A simple test of hand and eye coordination known as the Ball-and-Slot test was used as an index of manual dexterity. General mental development was measured by the Binet-Simon(Burt Revision) Scale. Group A consisted of 18 children from a Scottish secondary school with average mental ratio 103. Group B consisted of 33 children from school for the mentally defective(feebleminded) with average mental ratio of 58. Subjects had four practice periods a week for four weeks on the dexterity test. Each practice period consisted of 200 shots and the score was the number of balls correctly placed. The mean age of both groups was 13 years, both groups worked under the same general conditions and both were paid weekly to ensure regular attendance. Results were: 1) at the end of three week's practice there was practically no difference between defectives and normals in the test; 2) the difference between the groups was reduced to an amount not statistically significant after four days; 3) those defectives who started as well as the normal group reached a higher final score than the normal group, those normals who started as badly as the defectives did not reach as high a final score as the defective group.

Horne, Betty M. and Allen, Mary Lois. A study of vocational orientation of institutionalized adolescent mentally defective girls. Amer. J. Ment. Def., 1942, 46, 485-495.

The study utilized 45 institutionalized(Wayne County Training School) adolescent mentally defective girls with I.Q.'s of 60-80. Vocational orientation was defined as: 1) having knowledge of technical requirements of the job; 2) awareness of one's abilities and personality characteristics of job performance; 3) ability to plan for leisure hours; 4) understanding of salary expectations and necessary expenditures. Girls were rated according to plans for vocations in accordance with reality, knowledge of vocational requirements, plans for leisure recreational hours, reality of plans for making friends, accuracy of salary estimate, practicality of plans for spending salary. Subjects seemed to be well oriented to job expectation, their own limitations, vocational opportunities, skills and attitudes required by job and salary estimation. All were poorly oriented in regard to plans for meeting others and meeting recreational and social needs.

Johnson, Betsey Scott. A study of sterilized persons from the Laconia State School. Amer. J. Ment. Def., 1949, 54, 404.

A study of the relationship between sterilization and the community adjustment of 264 sterilized subjects(180 females with mean I.Q. of 54 and range of 10-99 and 83 males with mean I.Q. of 54 and a range of 34-77) at Laconia State School. The records showed 130 females paroled to family and 50 wage earners; 30 males paroled to family and 53 wage earners. Of the females 106 married and of these 45 were known to be satisfactorily adjusted. Of the males 21 married, 9 of whom were known as satisfactorily adjusted. Of the females 17 were habitually promiscuous.

Kam, Violet, Z. Progress Report, Work Classification and Evaluation Project, No. 503. Lanakila Crafts Inc., Honolulu 17, Hawaii, 1959-1962.

Lanakila Crafts was the administering agency for the Work Classification and Evaluation Project carried out in Honolulu, Hawaii, between October 1960 and July 1962. During that time 103 handicapped persons(mean age 29, mean I.Q. 73) were given a pre-training test battery after which they were assigned to one of five areas in the workshop. Each individual was rotated through each of the five areas where he was rated by a supervisor. The pre-training test scores and workshop ratings were statistically analyzed. It was found that I.Q., the Counting Test, the Finger Dexterity Test, and the Picture Interest Inventory could be used to predict in which of the five areas of the workshop a person would be most likely to succeed.

Katz, Elias. Changes in social competency ratings of seriously handicapped mentally retarded young adults in community rehabilitation programs. J. of Mental Subnormality, 1964, 10(2), 76-84.

The purposes of this study were: a) to compare staff ratings of enrollees in the Independent Living Rehabilitation Program(ILRP) over a six-month period from November 1962 to May 1963, and b) to determine what effect measured intelligence might have on changes in staff ratings. Findings were: 1) there appeared to be relatively small gains noted by the staff, for a small sample of enrollees; 2) with few exceptions, there was little regression noted in the social competency of enrollees during the six-month period; 3) measured intelligence as such seems to bear relationship to higher or lower ratings in social competency by the staff.

Katz, Elias. Rating the vocational potential of seriously handicapped young adults. California J. Educ. Research, 1965, 16(3), 116-122.

The Independent Living Rehabilitation Program was a demonstration project for rehabilitating seriously handicapped mentally retarded young adults, 18-35 years of age, so that they could take their places as productive citizens. The purpose of this study was to compare ratings by staff members of the ILRP of the social compentency of a group of enrollees characterized as "higher vocational potential" and a group of enrollees characterized as "lower vocational potential." In view of the small N. 13, and the lack of standardization of the ILRP Social Competency Ratings the following tentative conclusions were presented: 1) it is virtually impossible to predict in advance of admission to a program such as the ILRP whether a mildly, moderately or severely retarded youth will be higher or lower in vocational potential; 2) the only major difference in characteristics was a larger number of Mongoloids in the lower vocational potential group. There were only slight differences in age, measured I.Q. scores and sex composition of the groups. This suggests that there are areas of social competency in which those with lower vocational potential are not appreciable different from those with high vocational potential. In a number of items, especially those having to do with attentiveness, self-image as a worker, and reading and writing skills, the higher vocational potential group were rated as apreciably higher than the lower vocational potential group. Staff ratings on the ILRP Social Competency Ratings offer promise for a clearer definition of individual differences in vocational potential among enrollees for planning programs, and for evaluating the effectiveness of the ILRP.

Kelly, Douglas McG. and Barrera, S. Eugene. The Rorschach method in the study of mental deficiency. A resumé. Amer. J. Ment. Def., 1941, 45, 401-407.

A literature review of the Rorschach as a means of determining the influence of emotional factors on intellectual functioning of mental retarded. The Rorschach was not seen as differentiating the mentally retarded except to reveal those who were capable of intellectual functioning at a higher level than revealed by intelligence tests.

Kephart, N.C. The effect of a highly specialized program upon the I.Q. in high-grade mentally deficient boys. Proc. Amer. Assn. Ment. Def., 1939, 44, 216-221.

A study designed to support a theory that the level of intelligence of high-grade morons could be raised by providing stimulation through specialized programs. Sixteen boys(CA 15-18 and initial I.Q. of 48-80) were tested with the Stanford-Binet. Eighty percent of the group after being in the educational program(test-retest interval was six months - two years 11 months) showed a significant increase of five or more I.Q. points. Test-retest six months prior to experiment did not show this increase with only 36% gaining five I.Q. points or more. Comparison of these subjects with control group not exposed to the educational program showed only 23% of control group gaining five I.Q. points or more compared to 80% of the experimental group. The aim of the specialized program had been to stimulate constructive activity.

Kounin, J.S. Experimental studies of rigidity. I. The measurement of ridigity in normal and feebleminded persons. Charact. & Pers., 1941, 9, 251-272.

A measurement of ridigity in 21 old feebleminded(mean CA=42 and mean MA=7 years), and 21 young feebleminded(mean CA=15 and mean MA=7 years), and 21 normals(mean CA=7 and mean MA=7). Five experiments were conducted to measure skills of a volitional nature, the transfer of habits, motor skills in card sortings and cognitive functioning in tasks of integration and restructuring by classifications. The general conclusion was that any performance which requires a certain degree of communication between functions is more difficult for the older and more feebleminded individual.

Larson, Keith H. The characteristics of vocationally successful mentally retarded youth as described by two types of intelligence tests.(Abstract) Dissertation Abstracts, 1964, 25(5), 2815.

Four groups of 20 EMR subjects each, representative job holders still in school and out of school, successful and unsuccessful, were examined on the Wechsler Scales and the Raven's Progressive Matrices. The Raven discriminated the successful from the unsuccessful in-school subjects. The Total Performance scale and some of the performance sub scales of the WISC discriminated successful and unsuccessful subjects in both in-school and out-of-school groups. Verbal scores were of no discriminative value among any of the groups.

Linde, Thomas F. A Clinical Vocational Performance Index for Rehabilitation Workshops. Paper read at APA, Los Angeles, Calif., 1964.

Eight work rating scales and their relative weights were discussed. The scales included: attendance, perseverance, quantity of work, quality of work, worker's relationship to supervisor, worker's relationship to co-workers, criteria for grooming and generalization of work habits.

Lipman, R.S. Some test correlates of behavioral aggression in institutionalized retardates with particular references to the Rosenzweig Picture-Frustration study. Amer. J. Ment. Def., 1959, 63, 1038-1045.

A pilot study toward development of a test battery for selection of high-grade mental retardates whose aggressive drives would not prevent a successful institutional adjustment. Two groups of retardates, differing markedly in overt aggressiveness, were selected and matched for age, sex, race, I.Q., and socio-cultural background. The Children's Form of the Rosenzweig Picture Frustration Study, a highly frustrating mirror drawing task, and the Children's Form of the Manifest Anxiety Scale were individually administered to the 50 subjects included in the study. The analysis of the direction of aggression, type of aggression, and trends in these categories derived from the Rosenzweig P-F Study were found to have little or no relationship to behavioral aggression. The more frustrating mirror drawing task, however, significantly differentiated the groups. No relationship was found between the CMAS and overt aggressiveness.

McAffee, Ronald O.,and Clelard, Charles C. The discrepancy between self-concept and ideal-self as a measure of psychological adjustment in educable mentally retarded males. Amer. J. Ment. Def., July, 1965, 63-68.

The problem of this study was to determine whether the discrepancy between self-concept and ideal-self of EMR males is a valid and reliable indicator of their psychological adjustment. Subjects were thirty adjusted and thirty maladjusted retardates. Adjustment was determined by (1) qualifying statements and (2) attendants' ratings. The results suggested the following conclusions: 1) discrepancy scores are not valid indicators of psychological adjustment in EMR males; 2) EMR males use normal peers as ideal-self models; 3) length of residence has negligible influence upon self-concept, ideal-self and discrepancy scores; and 4) chronological age variation from 14 to 22 has little influence upon the three variables.

McPherson, Marion W. Learning and mental deficiency. Amer. J. Ment. Def., 1958, 62, 870-877.

A review of experimental studies of learning in individuals who achieve subnormal psychometric ratings, The review reveals a diversity of methodology and of results. Some papers highlight a slow, arduous learning process among mental defectives whereas others point to more skill in acquisition than is ordinarily assumed. There is evidence that intellectual level is not an adequate predictor of the learning of mental defectives and that their learning per se is variable.

Mercer, Jane R., Butler, Edgar W. and Dingman, Harvey F. The relationship between social developmental performance and mental ability. Amer. J. Ment. Def., 1964, 69, 195-205.

A study of the relationship between social developmental performance and mental ability. One percent of the housing units in a community of approximately 60,000 persons were selected. Each household in this sample was visited and an adult member was questioned about the social development level of each member of the household. The second phase of the study involved individual examination, using a standard intelligence measure. Samples of persons scoring at all levels of the Social-Developmental Index were tested to determine the relationship between the two measures. Results indicated that the Social-Developmental Index was highly related to mental ability for persons of school age but also less related to mental ability in adults and persons of preschool age. Developmental and school related questions were effective identifiers of those with low mental ability of school age but proved less effective with adults. Occupational level did not differentiate high intelligence from low intelligence. Physical handicaps and medical problems were not significantly related to low intelligence.

Merlet, L. Perception de soi ét statut sociometrique chez les adolescents debiles mentaux. In: Oster, J.(ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

A sociometric "popularity" questionnaire was used to select a group of 19 well-adapted and a group of 17 poorly adapted mentally retarded boys(mean I.Q. =66). A questionnaire on interpersonal behavior showed the poorly adapted to have greater difficulty in social contacts and a tendency to withdraw from social groups. A self-rating scale, however, showed a tendency among the poorly adapted to over-estimate themselves in terms of both skills and conduct, whereas the well-adapted tended to be more realistic in self-estimate.

Michal-Smith, H.I. A study of the personal characteristics desirable for the vocational success of the mentally deficient. Amer. J. Ment. Def., 1950, 55, 139-143.

Study to determine the success of mentally deficient individuals in four types of occupation: manual, repetitive, machine-operator, and social(jobs involving contact with public) and the relative importance of various personal characteristics in determining success. Information was obtained from a questionnaire submitted to 800 industrial personnel directors and 200 institutional heads. The two groups of respondents showed a high level of agreement(despite some specific differences) both on potential job success and on traits contributing to success in the four types of jobs. An index of traits considered important or unimportant in each case is presented.

Michal-Smith, H.I. "Personality training in vocational education for the retarded child." J. Except. Child., 1951, 17, 108-110.

List of fifteen personality traits and their relative importance in four work situations(manual, repetitive, machine, social) as indicated by 200 personnel directors.

Molish, H.B. Contributions of projective tests to problems of psychological diagnosis in mental deficiency. Amer. J. Ment. Def., 1958, 63, 282-292.

A review of the literature concerned with projective tests(Rorschach, TAT, Bender-Gestalt, World Test, Mosiac Test Designs, Human Figure Drawings) and psychological diagnosis in mental deficiency. The studies are concerned with three general areas: 1) performance of various groups of mental defectives in a variety of projective techniques; 2) factors of personality structure in the mentally deficient, emphasizing emotional factors in adjustment and considering mental deficiency as a possible symptom of personality maladjustment; and 3) investigations of various clinical categories of mental deficiency, i.e., familial vs. brain-injured, and schizophrenic reactions among mental defectives.

Moor, A.H. The importance of social development and adjustment in habilitating the retarded. In: Work Evaluation and Employment Preparation Services for Mentally Retarded Adults, Washington, D.C. Goodwill Industries of America, Inc., 1961, 19-31.

Social development and adjustment as a part of the habilitation process in the mentally retarded must be reflected in the educational objectives and educational curriculum.

Mundy, Lydia and Maxwell, A.E. Assessment of the feebleminded. Brit. J. Med. Psychol., 1958, 31, 201-210.

The difference in discrepancies between I.Q.'s derived from the Wechsler and the Raven's Progressive Matrices on the one hand and from the Wechsler and the Stanford-Binet on the other are attributed to the fact that: 1) the content of the Stanford-Binet is unsuitable for adults, and 2) the S-B has never been truly standardized for adult subjects. In view of these considerations and the fact that the Wechsler and the Matrices tend to show more agreement, it was suggested by the authors that the Stanford-Binet grossly underestimates the intellectual ability of the "feebleminded," especially in the higher age groups.

O'Connor, N. and Yonge, K. Methods of evaluating group psychotherapy of unstable defective delinquents. J. Genet. Psych., 1955, 87, 89-101.

Three groups of feebleminded delinquents were matched as closely as possible for age, I.Q. and behavior disorders: 1) the control group continued in regular hospital routine; 2) the workshop group were in a supervised workshop setting; 3) experimental group were participating in group psychotherapy. Results indicated that the experimental group increased its verbal intelligence scores, increased participation in group discussion and increased in amount of total participation.

Ogdon, Donald P. and Allee, Ruth. Rorschach relationships with intelligence among familial mental defectives. Amer. J. Ment. Def., 1959, 63, 889-896.

Sixty familial mental defectives were examined with the Rorschach and Wechsler Bellevue to test the following questions: 1) are purported Rorschach signs of intelligence significantly correlated with I.Q.? 2) are certain Rorschach personality signs related to the progressive degree of mental retardation? Significant correlations were found between Wechsler I.Q. and a number of the Rorschach measures.

Ordahl, George, Keyt, Nellie L. and Wright, Clarke. The social competence of high-grade mental defectives determined by self-report(self concept). Amer. J. Ment. Def., 1944, 48, 367-373.

A study of the social competence of high-grade mental defectives(N=194 women, 122 men; I.Q.=44-79; CA=14-65) as determined by self report utilizing the Vineland Self-Report. Men scored higher on socialization and occupation while women scored higher in self-help. Estimate of social competence before commitment indicated that if subjects were exercising as much self-direction as they stated, they were given more responsibility than usual for a child that age and this may be the reason for commitment, i.e., they were being neglected. All subjects passed items through SA 5-6 and none beyond 18-20.

Parnicky, J.J., Kahn, Harris and Burdett, Arthur. Preliminary efforts at determining the significance of retardates' vocational interests. Amer. J. Ment. Def., 1965, 70(3), 393-398.

This paper describes a VRA sponsored project to standardize and validate a reading free technique for measuring vocational interests and knowledge of retardates in job areas for which they generally have potential and to which they can realistically aspire. Preliminary data suggests that the type of program in which the retardate is placed(i.e., school, sheltered workshop or institution) sufficiently influences the scores attained to require special consideration in establishing norms and in counseling. Implications of occupational interest profiles in the rehabilitation process are also discussed.

Patterson, M. and Magaw, D.C. An investigation of the validity of the Rorschach technique as applied to mentally defective problem children. Proc. Amer. Assn. Ment. Def., 1938, 43, 179-185.

The Rorschach as applied to a group of mentally defective problem "children" (N=30, CA=14-26) using Beck's system of scoring. The psychograms and interpretations by the tester were matched blindly with personality sketches made by an observer. Both were able to match findings correctly more often than could be attributed to chance. There was no significant relationship between I.Q. estimated by Rorschach and I.Q. measure by standard psychometric tests.

Poppleson, J.A. The validity of projective interpretation of art products of mental defectives. Amer. J. Ment. Def., 1954, 59, 263-265.

A review of studies dealing with art products of mentally retarded, with projective interpretations about perception of reality, covert activity, and motivational dynamics. The papers included in this study suggest the following historical and personal characteristics of the subjects as variables that contribute to their art products: intracranial pathology, nationality, sex, chronological age, MA as measured almost exclusively by verbal tests, and social difficulties as indicated by staff evaluation of institutional adjustment or by Rorschach responses.

Potter, Howard W. The relation of personality to the mental defective with a method for its evaluation. J. Psycho-Asthenics, 1922, 27, 27-40.

An early discussion of the assessment of personality in the mental defective. The author stated that a study of personality should reveal the assets and liabilities of the mental retard; how he reacts to pressures, to insecurities; how he sets about to accomplish his goals and what are his underlying motives. Personality was dissected into the following components: intellectual, sense of responsibility, industrial efficiency, output of nervous and muscular energy, habitual reaction to inferiority, sociability, conduct and behavior, mood, reactions related to moods, special activities and interests and unique pathological traits. A guide to evaluate these traits was provided but not tested.

Pritchard, Miriam. The mechanical ability of subnormal boys. T.C. Contributions to Education, 1937, No. 69, Columbia U.

An attempt to test factors apart from intelligence which might be contributing forces in the trade-training performance of 79 subnormal boys at Edenwald School for Boys in New York(CA=12-18 and MA=9-15). Tests administered were the Stanford-Binet I.Q., Minnesota Paper Form Board, Minnesota Spatial Relations, Minnesota Assembly, Heckbard Interest Analysis Blank, Maller Character Sketches, Haggerty-Olson-Wickman Behavior Rating Scales. The criterion measure was a project in elementary wood-working. Results indicated that mechanical ability tests cannot be associated with measures of intelligence. A correlation coefficient of .61 was found between scores on the Minnesota mechanical ability battery and criterion scores.

Rasmussen, H. Psychotechnical investigations as an element of vocational guidance. In: Oster, J.(ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

A description of the psychotechnical assessment of 170 mentally retarded under public care. Some of the tests included were: an intelligence test with an easy text, involving opposites and underlining the correct answer; a test of attention not requiring reading ability; perception of form, accuracy of manual skill; and working speed combined with co-ordination. The advantage here is that it takes a short time to evaluate a person in relation to a certain job. The intelligence tests revealed that in some areas normals and retardates merged, in non-verbal tests many retardates reached the average of the normally gifted, while perception of form revealed that a large group of retardates were unsuited for particular types of occupation and in accuracy of manual skill a group did not understand the instructions.

Rosenblatt, B. and Solomon, P. Structural aspects of Rorschach responses in mental deficiency. J. Proj. Tech., 1954, 18, 496-506.

A study of structural aspects of Rorschach responses at different levels of mental deficiency compared to the responses of normal adults, children with the same MA and pathological groups. Friedman's scoring was used with the total R, W%, good W%, D%, good D% in protocols compared. Some differentiating characteristics of the protocols are reported.

Sadnavitch, J.M. Assessment of vocational rehabilitation potential of mentally subnormal institutionalized individuals. Dissert. Abstr., 1958-1959, 19, 1685.

Problems studied: 1) to compare test performance of mentally deficient with normal intelligence individuals; 2) to isolate aptitude patterns that characterized each group; 3) to see which occupations these patterns were suited for, based on standardization of the test by the U.S. Employment Service. The instrument used was the General Aptitude Test Battery, composed of 12 tests and 9 aptitude factors: intelligence, verbal aptitude, numerical aptitude, spatial aptitude, form perception, clerical perception, finger dexterity, and motor coordination. A total N of 1225 subjects was used, the groups consisting of 191 institutionalized mentally subnormal individuals, 304 high school seniors, 266 diversified individuals whose educational level varied from college graduate to the 6th grade and 464 technical high school freshmen respectively. Analysis of variance technique was used to determine similarities and differences between groups. The groups were significantly different at .01 level. It was found that the GATB did not differentiate adequately on the lower end of the scale between the ratings of normal individuals. Only 3% of the subnormals achieved occupational aptitude levels in contrast to substantial numbers in the other groups. The GATB indicated only a few subnormals with sufficient ability for adequate occupational success. Also the vocational potential displayed by the mentally subnormal group was not commensurate with qualifications demanded by the majority of specific occupations considered in the study. Previous follow-up studies have not substantiated these limitations.

Sarason, S.B. The use of the TAT with mentally deficient children. I. A study of high-grade girls. Amer. J. Ment. Def., 1943, 47, 414-421.

A study of the use of the TAT with 13 institutionalized females(CA=16-35 and I.Q.=32-94). Themes occurring with high frequency were: 1) aggression and desire for affection and 2) rebellion against parents, guilt and loneliness. The author felt that these two themes were related to the traumatic experience of being separated from home and feeling rejected by the parents.

Sarason, S.B. The use of the TAT with mentally deficient children. II. A study of high-grade boys. Amer. J. Ment. Def., 1943, 48, 169-173.

Study of the use of the TAT with 12 mentally deficient boys(CA=15-36, with M=22; I.Q.=45-76 with M=63). Data was not presented statistically; however, findings revealed aggression, rejection, ambivalence towards parents, guilt, fear of loneliness as the prevalent themes. Comparing these subject themes with girls themes(see above) it was found that boys showed less "feeling and emotional fervor." Aggression was expressed in a more generalized form. Conclusions were the mentally retarded themes are similar to normals in that they express the same needs and fears. The TAT has potential value for placement.

Sarason, S.B. Projective techniques in mental deficiency. Character Pers. 1945, 13, 237-245.

The author expresses the opinion that the Stanford-Binet cannot be adequately used for evaluating mentally retarded because its validation is based on a normal population and not a mentally retarded population. Personality evaluation of the mentally retarded can be made via the utilization of projective techniques but with caution against applying criteria obtained from normal populations.

Sarason, S.B. and Sarason, E.K. The discriminatory value of a test pattern in the high-grade familial defective. J. Clin. Psych., 1946, 2, 38-49.

An attempt to determine whether test patterns can differentiate between well-adjusted and poorly adjusted high-grade defectives. The criterion for adjustment was the Kohs score above the Binet at least 18 points for the well-adjusted group(N=11) and the Kohs score below the Binet at least 18 points for the poorly adjusted group(N=16). Predictive tests were certain subtests of the Stanford-Binet(1937), the Arthur Performance Test, the Rorschach, Electroencephalographic examination. Work records and anti-social behavior of subjects were compared. Group I, successfully adjusted, had significantly higher scores on Binet subtest scores and Arthur Performance Test. On the Rorschach, Group I also gave no minus responses and fewer M, F and total responses than group II and tended to reject more cards than Group II. Group II gave minus responses and fewer FC and more C and CR responses than did Group I. The composite picture of Group I from case records tended to be more conforming while Group II tended to have less emotional control, poorer work records and more anti-social behavior. Those with poor emotional adjustment tended to have test patterns similar to those with cerebral disorders.

Shaw, Marvin E. and Bensberg, Gerard J. Level of aspiration phenomena in mentally deficient persons. J. Pers., 1955, 24, 134-144.

A study to determine the degree to which differentiation is a negative monotonic function of the degree of mental deficiency. Eighty institutionalized subjects(CA=19-21, I.Q.=43-62) were divided into four groups according to mental age. Each group was again divided, one half being exposed to success and one half to failure. Each subject was exposed to three tasks successively to test the level of aspiration. The setting of the level of aspiration for a different task following a success or failure experience on a similar task varied with the degree of mental deficiency. The concept of differentiation was considered to account for the findings: the more mentally deficient the individual, the fewer categories are available for classifying experience and hence the greater the probability that two different tasks will be regarded as being alike.

Silverstein, A.B. Psychological testing practices in state institutions for the mentally retarded. Amer. J. Ment. Def., 1963, 68, 440-445.

A national survey was conducted of psychological testing practices in state institutions for the mentally retarded. Ninety-six out of 124 such institutions in the U.S. returned useable responses. The usage of specific tests was reported and the frequency of usage was compared with that reported by Sundberg for a more general selection of clinical agencies and hospitals throughout the country. Most frequently used tests were the Bender-Gestalt, Cattell Infant Intelligence Scale, Goodenough Intelligence, Machover Draw-a-person, MMPI, Rorschach, Stanford-Binet Intelligence, TAT, Vineland Social Maturity Scale, WAIS, Wechsler-Bellevue Intelligence, WISC, and Wide Range Achievement Test. Responses to questions dealing with the most common reasons for referral, the use of tests in research, testing practices of earlier times and expected changes in the future, and the greatest needs in testing for the retarded were presented and discussed.

Sloan, W. and Cutts, R.A. Test patterns of defective delinquents on the Wechsler-Bellevue test. Amer. J. Ment. Def., 1945, 50, 95-97.

An attempt to determine the sub-test pattern of the Wechsler-Bellevue on a group of 50 high-grade and borderline defectives who showed indications of delinquency(CA=15-32 and I.Q.=49-80). Behavior had been characterized by frequent attempts to escape, fighting, and destructiveness. The pattern on the Wechsler was found to be similar to that of the adolescent psychopath. It differed from that of other mental deficients on Comprehension, Picture Completion and Vocabulary.

Sloan, W. and Oblinger, Barbara. Diagnostic value of picture anomalies and verbal absurdities for institutional adjustment. Amer. J. Ment. Def. 1947, 51, 532-534.

A comparison of 22 institutional females considered maladjusted and 22 considered adjusted(matched for CA, MA and I.Q.), to determine diagnostic value of picture anomalies and verbal absurdities for predicting institutional adjustment. No difference was found on the McGill picture anomaly series; but a slight difference(not significant) was found in the S-B verbal absurdities in favor of the maladjusted group. It was nevertheless concluded that the duller a person's social comprehension the more likely his adjustment to the institution.

Solomon, P. Differential Rorschach scores of successfully and unsuccessfully placed mental defectives. J. Clin. Psychol., 1955, 11, 294-297.

Differential Rorschach scores of 30(19 females and 11 males; CA=20-45; I.Q.=44-81) successfully placed mental defectives compared to 22(12 females and 10 males; CA=20-40; I.Q.=45-73) unsuccessfully placed mental defectives. The criterion for successful placement was continuous employment for eight months after parole. Human responses occurred significantly more often in the successful group. Other responses were not significant.

Stacey, Chalmers and DeMartino, Manfred F.(eds) Counseling and Psychotherapy with the Mentally Retarded: A Book of Readings. Glencoe, Ill., Free Press 1957.

Readings on counseling and psychotherapy, psychoanalysis methods, group therapy, play therapy, psychodrama, speech therapy, occupational and industrial therapy, and counseling with parents. An observation made by the authors was that psychotherapy with mentally retarded could gain results because of their belief the retarded are capable of gaining some insight into their problems.

Stacey, Chalmers and Gill, M.R. The relationship between Raven's Colored Progressive Matrices and two tests of general intelligence for 172 subnormal adult subjects. J. Clin. Psychol., 1955, 11, 86-89.

The relationship between Raven's Colored Progressive Matrices and the Stanford Binet and the Wechsler tests of general intelligence for 172 subnormal adults (105 females and 67 males, CA=16-57). Correlative coefficients of .86 between Matrices and the revised Stanford-Binet, Form L, .56 between Matrices and the Wechsler Verbal Scale; .51 between Matrices and the Wechsler Performance Scale and .68 between Matrices and the Wechsler Full Scale I.Q. were found.

Tizard, J. and O'Connor, N. "The employability of high-grade mental defectives II. Amer. J. Ment. Def., 1950, 55, 144-157.

Temperamental factors which may affect vocational efficiency and social competence were named and the literature was reviewed. Although the defective is perhaps more liable to emotional instability than those of high intelligence, there is no reason to suppose that he is less persistent or more suggestible than other members of the community of comparable socio-economic status. His performance level on aspiration tests do not distinguish him as a class from the normal. He is apparently no more susceptible to monotony than a normal worker and may even be less so. There is no evidence he is likely to vary in output more than the normal worker and, unless neurotic, unlikely to be more prone to injury than his fellows.

Tizard, J., O'Connor, H. and Crawford, J.M. The abilities of adolescent and adult high-grade male defectives. J. Ment. Sci., 1950, 96, 889-907.

A study of the distribution of abilities of 104 high-grade mental defectives (mean CA=21) as measured by the Kohs Blocks, Progressive Matrices, Vocabulary Test of Binet, Form L;Porteus(1938) Maze; Cattel Non-Verbal; USES General Aptitude Test and Rail Walking Test. Intercorrelations among all tests except the Binet Vocabulary were positive. Mean I.Q. on Cattel was 20 points lower than the mean I.Q. on the Porteus Maze which was the largest discrepancy among the I.Q. tests used. The USES battery showed the subjects to be less retarded in form perception and spatial aptitude than in hand-eye coordination, manual dexterity, finger dexterity and motor speed.

Tobias, J. and Goerlick, J. "The Porteus Maze Test and the appraisal of retarded adults." Amer. J. Ment. Def., 1962, 66, 600-606.

Review of studies of relationships between Porteus Maze scores and aspects of workshops and training situations with attention to competitive employment. The Mazes were found to be primarily useful in determining adaptation to less vigorously structured operations than those provided in a sheltered facility.

Tobias, J. and Gorelick, J. Work character of retarded adults at trainable levels. Mental. Retard., 1963, 1, 338-344.

An investigation of work characteristics of severely retarded adults deemed unsuited for employment in a sheltered workshop. It was found that productivity is significantly related to measured intelligence and that an I.Q. of 20 constituted an approximate limit below which work is unsuitable. Deferred monetary incentives provided only momentary motivation for increased productivity which was not sustained beyond the first hour. Work tolerance was positively related to intellectual level with the most retarded group showing the greatest effect of boredom and fatigue. There was also a relationship between retention and intelligence. The least retarded group showed the least decrease in efficiency after a lapse of practice. Mongoloid retardates proved to be significantly less productive than their intellectual peers who fell into other categories of retardation.

Urich, D.A. Picture inventory of semi-skilled jobs(male and female forms) Brandon: Vermont, Brandon Training School, 1960.

A Picture Inventory of semi-skilled jobs(male and female forms) was developed on the basis of a questionnaire sent to 110 state institutions inquiring as to the major jobs utilized by the mental retardates. The test was an attempt to aid the retardate in his self expression of job preference. Due to the mental retardate's potential reading handicap, a picture interest test was decided upon. Male and female forms were designed, because of the reported variation between job placement patterns. Reliability and validity of the test are still to be established.

Voelker, Paul H. Curriculum implementation for the work-study program. In Miller, Donald Y. and Danielson, Richard H.(eds) Work-Study for Slow Learners in Ohio. Columbus, Ohio, Superintendent of Public Instruction, Ohio Dept. of Ed., 1965, 25-43.

The role of the special education curriculum in relation to vocational competency was considered. A brief review of the literature on the post-school adjustment of the mentally retarded revealed that the I.Q., while of consequence, is not nearly as important to vocational success as are personality variables, including a sense of responsibility, honesty, and willingness to accept direction. Academically a second grade level of reading and arithmetic seems necessary. Detailed case histories of two mentally retarded boys, illustrating both post-school success and failure, are presented.

Werner, H. Rorschach method applied to two clinical groups of mental defectives. Amer. J. Ment. Def., 1945, 49, 304-306.

A Rorschach assessment was made of two clinical groups of mental defectives matched for CA and MA; one group was brain injured, the other was a familial type of mental deficiency. The brain injured gave no dd responses while 17% of familial did. Do responses were four times more frequent in the brain injured than in the familial. The brain injured gave significantly more S responses and also saw human and animal figures as static while the familial saw them as moving. In M/C ratio the brain injured gave C over M by 3 to 1, while among familials M and C were more equal in frequency.

Winthrop, H. Psychological and economic factors governing the industrial utilization of the mentally defective learner. Amer. J. Ment. Def., 1956, 61, 181-190.

A summary of literature in the field of industrial learning regarding the abilities of mental defectives and their placement. The length of the learning period and the point at which average production is reached are discussed. Success or failure may be incorrectly diagnosed if made during inappropriate times on the learning curve.

Wittenborn, J.R. and Sarason, S.B. Exceptions to certain Rorschach criteria of pathology. J. Consult. Psychol., 1949, 13, 21-27.

From the authors' experience as illustrated by the cases presented, the Rorschach determinants used for prediction of pathology were questioned as valid predictors of pathology. One example given is the use of factors to indicate intellectual potential. Mental defectives sometimes give good original responses even though there is never anything is regard to their behavior to indicate they have potential above their present level. The use of good original responses as predictive of intellectual potential for mental defectives is not valid if considered in isolation.

Wolfensberger, Wolf. Age variations in Vineland S.Q. scores for the four levels of adaptive behavior of the 1959 AAMD Classification. Amer. J. Ment. Def., 1962, 67, 452-454.

A table was constructed giving Vineland S.Q. scores for all age groups and corresponding to the four levels of Adaptive Behavior as defined by the AAMD in 1959. The S.Q. scores for the various levels varied by as many as 61 points between age groups which indicated the necessity for converting scores into levels or into standard scores for comparison purposes.

Young, M.A. Academic requirements of jobs held by the educable mentally retarded in the state of Connecticut. Amer. J. Ment. Def., 1958, 62, 792-802.

A study to determine the specific academic requirements of jobs held by educable mentally retarded individuals in the State of Connecticut, based upon an analysis of 118 jobs. These academic requirements may include reading, mathematics, writing, spelling, oral language and trace vocabulary. A job analysis sheet for academic requirements was organized and tested and agencies were contacted for a list of jobs held by the educable mentally retarded. Employers and personnel managers were then interviewed and the information collected. The jobs analyzed were then classified into job areas and a list of trade vocabulary words was organized alphabetically for each job area.

V. ENVIRONMENTAL VARIABLES

Blackman, L.S. and Kahn, H. Success and failure as determinants to industrial efficiency of a group of mental deficients. J. Delinq., 1925, 9, 83-104.

An evaluation of the effects of equal magnitudes of success and failure experiences on the Aspirational Shifts of 48 educable mentally retarded adolescents and a control group matched for CA. Normals experienced a greater aspirational shift after success than retards; however, retardates were more variable in goal setting behavior under success conditions. Retarded males evidenced less of a downward shift in aspiration after failure than normals.

Bolduc, T.E. Social value-need patterns in mental retardates. J. Consult. Psychol., 1960, 24, 472-479.

Fifty white retarded females(25 institutional, 25 special education classes) were tested on a scale on 95 items with each item constructed so that subjects had to make a forced response to a social situation. The choice was either social value(honesty, loyalty, responsibility) or a social need(nurturance, succorance, dominance, affliction, difference). By a method of matrix intercorrelations six factors were extracted which reflected differences between value and need responses. Two factors, Factor V, preference to appear dominant in relationship with peers and Factor VI, preference for a negative rebellious attitude toward authority figures, were found to have the highest factor loadings by institutionalized subjects.

Burke, J.L., Isaac, D.M. and LaFave, H.G. Re-appraisal of the diagnosis of mental deficiency in mental hospitals. J. Clin. Psychol., 1963, 19, 359-361.

This study is based on the chronic population at Medfield State Hospital, Harding, Mass., where some patients are diagnosed as mentally deficient and others are considered mentally deficient by the staff and ward personnel, although not dianosed as such(N=92, CA=17-59, mean of 43.8; length of hospitalization 2-53 years with mean of 12.6 years). The patients were tested on the vocabulary, picture completion and information subtests of the Wechsler-Bellevue Intelligence Scale. 58% of these patients were able to display intellectual functioning of at least a borderline level. This program of testing was designed to make therapeutic use of work facilities within the hospital. More challenging work placements and an increase in work and social performance expectations have shown positive results. These results suggest that unfavorable diagnoses, low levels of expectation, and custodial type of treatment are involved in the continuing chronicity of many mental patients.

Chandler, C.S. and Shafter, A.J. A critique of the group placement concept. Amer. J. Ment. Def., 1955, 59, 517-521.

Group placement has been supported by Cate & Gegenheimer, Wardell & Harmes, who list 10 characteristics that make group placement advisable. Disadvantages, however, are that it: 1) hinders assimilation into the community; 2) natural leaders may lead others into trouble; 3) individual treatment is minimized; 4) a patient's poor adjustment may reflect upon other patients.

Charles, D.C. and McGrath, Kay. The relationship of peer and staff ratings to release from institutionalization. Amer. J. Ment. Def., 1962, 67, 414.

Follow-up study of 164 institutionalized mentally retarded children to determine whether social rating by peers or staff was more indicative of successful adjustment after release. It was concluded that peer ratings were not useful enough in prediction of release or success of adjustment to warrant their utilization.

Clarke, A.D.B., Clarke, A.M. and Reiman, S. Cognitive and social change in the feebleminded - three further studies. Brit. J. Psychol., 1958, 49, 144-157.

Three studies of feebleminded in British institutions concerned with I.Q. variability in relation to duration of institutionalization and patients' previous environment. Study I concluded that prognosis of social competence and a greater increase in I.Q. were directly related to the degree of deprivation in home environment. Studies II and III presented substantiating evidence that I.Q. change is more a function of removal from adverse environmental conditions than of entry into an improved institutional environment.

Clarke, A.D.B. and Fleiss, H. Adult imbeciles - their abilities and trainability. Lancet., 1955, 11, 337-339.

A study of task competency of six adult imbeciles after training in four task experiments. Results showed that initial ability for industrial tasks is low for imbeciles; initial ability is not related to level achieved with training; and the main difference between imbeciles and normals in task performance is not in end-level, but in time required to achieve it.

Cohen, J.S. Employer attitudes towards hiring mentally retarded individuals. Amer. J. Ment. Def., 1963, 67, 705-713.

A study of employers' attitudes toward hiring the mentally retarded in relation to employers' education, concept of retardation and prior vocational contact with retarded. Results yielded a negative relation between employers' attitude and educational level, a positive relation between employers' education and a realistic conception of retardation, and a negative relation between employers' attitude and prior vocational contact with retarded.

Cohen, J.S., Ziegler, R., Lipman, R., Adams, F. and Morelli, D. The development of a job instructor training program for institutional service workers. Amer. J. Ment. Def., 1961, 66, 381-386.

The author states that one of the most meaningful and effective forms of vocational training for the mentally retarded in a residential setting is supervised work placement of residents within the institutional work areas. To accomplish this work required skilled work supervisors; therefore the authors discuss and evaluate a Job Instructor Training Program.

Cowan, Lawrence and Goldman, Morton. The selection of the mentally deficient for vocational training and the effect of this training on vocational success. J. Consult. Psych., 1959, 23, 78-84.

Twenty subjects who had received VR training, were mentally retarded and had no physical defects, were matched with 20 non-trained mentally retarded for age, sex, race, I.Q., education, past work experience and lapsed time since last I.Q. testing. By questionnaire it was found that the trained group had more vocational successes and success was unrelated to I.Q. level, formal education or past work experience; however, the trained group had been placed on the job by a vocational counselor and this may have had some effect.

Crump, W.A. and Harry, W.M. Foster homes help mentally retarded. Rehab. Record., 1964, 5, 23-25.

Residence in foster homes in Atlanta has been found to be a significant help in the vocational rehabilitation of a group of mentally retarded persons from outlying areas of Georgia. They are clients of the state vocational rehabilitation program's special project started in 1961 in cooperation with Goodwill Industries of Atlanta to provide these mentally retarded young people with vocational rehabilitation services not available in their home communities. The foster homes helped the retardates to learn and practice good personal habits, develop good attitudes, social skills and work habits, and to learn to use leisure time wisely.

DiMichael, S. The problem of post-adolescence. The Except. Child Faces Adulthood. Woods School, 1955, 24-38.

A survey of various studies concerned with aspects of the mental retardate's social and vocational adjustment. Most research with mental retards had been concerned with vocational adjustment and the majority of them find jobs without much difficulty or supervision. However, research on personal and social adjustment is sparse and fragmentary even though most of the difficulties encountered are of a social and emotional nature.

Doll, E.A. Influence on environment and etiology on social competence. Amer. J. Ment. Def., 1945, 50, 89.

The influence of length of institutional residence, paternal occupation, endogenous or exogenous etiology on social competence of feebleminded measured by the Vineland Social Maturity Scale. A very low positive correlative was found between duration of institutionalization and social age. Parental occupation was related to social competency in subjects under CA 25. Endogenous etiology tended to be associated with higher MA, higher SA and greater difference between MA and SA.

Dybwad, G. The problem of institutional placement of high-grade mentally defective delinquents. Amer. J. Ment. Def., 1941, 45, 391-400.

A discussion of the social adjustment of defective delinquent boys after training in an institution for defectives as compared to the social adjustment of boys trained in an institution for juvenile delinquents. Both types of institutions were reported to have been successful to some degree in training the defective with no conclusive evidence of difference.

Fudell, S.E. Occupational educational units for mentally retarded adolescents. Dissert. Abstr., 1963, 24(6), 2358.

An experiment designed to increase potential for success in the socio-economic world for mentally retarded adolescents(secondary school educable). Practical knowledge of vocational possibilities was transformed into 12 weekly curriculum units. A control group followed the standard curriculum. Significant differences favored the experimental group in occupational readiness, personal behavior, and social personality. No difference was found in academic proficiency.

Gellman, W. Work as a psychologically common core for social services. The Workshop--A Dynamic Rehabilitation Tool. Monograph No. 2, Jewish Vocational service, Chicago, Ill., 1959.

A discussion of how the productive role an individual holds influences his social status. If a person has an inadequate vocational pattern or an unacceptable productive role, he soon loses confidence in his abilities. The vocationally handicapped in this position need help in acquiring skills necessary to become productive members of society.

Gellman, W., Neff, W., Goldman, E. and Soloff, A. The Workshop--A Dynamic Rehabilitation Tool. Monograph No. 2, Jewish Vocational Service, Chicago, Ill., 1959. See separate studies under individual authors.

Gesell, A. Vocational probation for the subnormal youth. Mental Hygiene. April, 1921, 321-326.

Discussion of favorable conditions for community adjustment of the retarded.

Goldman, E. and Soloff, A. Differential approaches to the rehabilitation of retarded within a workshop setting. The Workshop--A Dynamic Rehabilitation Tool. Monograph No. 2, Jewish Vocational Service, Chicago, Ill., 1959.

Vocational potential cannot be adequately predicted by the present diagnostic methods which emphasize verbal factors and concomitant learning difficulties. The Workshop adds both to diagnosis and to rehabilitation in the vocational area. The Vocational Adjustment Center of the Jewish Vocational Service helps mentally retarded to obtain employment on the open market through guided work experience. Retardates may enter the program with the same diagnosis, but with different methods of coping with the environment. The most common methods are: conformity, suspicion, withdrawal, acting out and non-achievement. The program is most successful with the conforming and non-achieving.

Gordon, S., O'Connor, N. and Tizard, J. Some effects of incentives on the performance of imbeciles. Brit. J. Psych., 1954, 45, 277-287.

Three groups of subjects were tested on a routine task(Leg Persistence Test) and then retested under three different situations: 1) Control group: no change in instructions; 2) Encouragement group: given encouragement; 3) Goal group: had knowledge of first test's results and encouraged to obtain new goals. The performance of the goal group was significantly better than the other two groups, the encouragement group was significantly better than the control group, which showed no improvement. With rotation of subjects through all conditions, the goal condition remained sugnificantly higher. Eight weeks after original testing the goal group was shifted to the control condition, with resulting lower performance than the original control group.

Gordon, S., O'Connor, N. and Tizard, J. Some effects of incentive on the performance of imbeciles on a repetitive task. Amer. J. Ment. Def., 1955, 60, 371-377.

Four groups of 10 male imbeciles matched for performance on a simple repetitive manual task, were trained on the task under differing conditions of motivation. 1) Goal group, based on previous performance. 2) Control group with no motivation except, "do your best." 3 & 4) Competed with each other singly or in groups. Self-Competition(goal) motivation produced the best performance The control group was lowest. Change from Control or Competition to Goal incentives resulted in an increase in performance level.

Gorlow, L., Butler, A., Einig, K.G. and Smith, J.A. An appraisal of self-attitudes and behavior following group psychotherapy with retarded young adults. Amer. J. Ment. Def., 1963, 67, 983-989.

This study attempts to determine whether group psychotherapy with young, institutionalized, female retardates would occasion greater self-acceptance and more positive institutional behavior. After twelve weeks of three weekly hour-therapy sessions, no differences in self-attitudes and behavior were found.

Graham, J.A.G. An investigation into the social background of dull and backward children. Med. Off., 1958, 99(14), 191-196.

A comparison of small samples of retarded(I.Q. 70-76) and normal youths. aged 15-21, on social backgrounds, indicating a significantly higher incidence of illegitimacy, instability, delinquency, school truancies, employment in unskilled labor and low ratings by employers in the mentally retarded group.

Greene, C.L. "A study of personal adjustment in mentally retarded girls." Amer. J. Ment. Def., 1945, 49, 472-476.

Study of personal adjustment of 90 girls(45 problem girls and 45 well-adjusted grils) at North Jersey Training School. Qualifications were that girls be between 14-21 years of age and able to write. Groups were similar with respect to life age, test age, school achievement and social condition. Small differences were: The adjusted group had been in residence over a year longer; was over a year more mature in the Draw-a-Man Test; had less neuropathic ancestry; had fewer commitments because of behavior difficulties; came more frequenly from other institutions and foster homes. The unadjusted group showed more emotional dependency upon the home situation, more first and latter-born positions with regard to sibling rank, less well developed recreational interest, more aggressiveness in social situations and tended to take things more personally.

Harris, Lucy and Sievers, Dorothy J. A study to measure changes in behavior of aggressive mentally retarded adolescent girls in a permissive classroom. Amer. J. Ment. Def., 1959, 63, 975-980.

A study of behavior changes in 18 adolescent mentally retarded girls with agressive behavior problems from Columbus State School when placed in a permissive classroom. It was found that positive behavior tended to increase and negative tended to decrease in the school room over one to two year time span for this group.

Hartlage, L.C. Factors affecting employer receptivity toward the mentally retarded. Amer. J. Ment. Def., July, 1965, 108-113.

The population of Frankfort, Kentucky employers was contacted by either mailed questionnaires or personal interview to assess its receptivity toward hiring mentally retarded workers. With employers equated for size and type of industry, four contact approaches were used involving mail and interview, disability and problem-centered terminology. There were no differences among approaches, but there were significant differences among types of industries and size of industry, with larger industries more receptive. Education of employers was not significantly related to receptivity.

Heber, R.F. Motor task performance of high-grade mentally retarded males as a function of the magnitude of incentive. Amer. J. Ment. Def., 1959, 63, 667-671.

Thirty-six high-grade mentally retarded males were involved in a motor task situation to determine the functional relationship of performance to incentive. Results showed that greater performance efficiency occurred under a high as compared with a low preference incentive. With a shift from low to high preference incentive, rapid increment of speed of performance occurred and with a shift from high to low preference incentive, a rapid decrement of performance resulted.

Hobbs, Mary T. A comparison of institutionalized and non-institutionalized mentally retarded. Amer. J. Ment. Def., 1964, 69, 206-210.

A comparative study of 27 institutional and 23 non-institutional retardates through interviews and case records. The institutional group was found to have a higher incidence of anti-social or immoral behavior, fewer educational opportunities, less professional help, was more often from broken homes, was less conforming to societal standards, and had parents with less adequate educational background. No differences were found with respect to family size or to parental attitudes of acceptance or rejection.

Hoyle, S. Home conditions and employment of mental defectives. Amer. J. Ment. Def., 1951, 55, 619.

A comparison of survey studies of occupations and home conditions of mental defectives in 1929 and 1949 in Leeds, England. In home conditions it was found that from a sample of 772 males living under supervision in 1929, 12% were in good home conditions, 77% fair, and 9% poor home conditions as contrasted with a comparable population in 1949 with 66% in good home conditions, 31% fair, and 3% bad home conditions. Criteria of good home conditions were care, comfort, cleanliness and no over-crowded living conditions. Employment ratings in 1929 found 51% wholly or partially self-supporting and 29% unemployable as contrasted in 1949 with 64% self-supporting and 26% unemployable.

Hyde, R.W. and Kingsley, L. Studies in medical sociology: 1. The relation of mental disorders to the community socio-economic level. New Engl. J. Med., 1944, 231, 543-548.

A study of the relation of mental disorders to the community socio-economic level in 60,000 mental rejects examined at the Boston Armed Forces Induction Station. In total incidence of major mental disorders 7.3% came from the best communities as contrasted with 16.6% from poorest communities; rate of mental deficiency .9% from the best communities as contrasted with 6.9% from poorer communities; rate of psychopathic personality, 2.4% from the best communities as contrasted with 6.9% from poorest communities. The rate of psychoneurosis showed no consistent variation with socio-economic level, while the rate of psychosis increased with declining socio-economic level.

Kaufman, M.E. The formation of a learning set in institutionalized and non-institutionalized mental defectives.. Amer. J. Ment. Def., 1962, 67, 601-605.

An evaluation study of possible effects of institutionalization on the learning of object-quality discrimination problems utilizing the Wisconsin General Test Apparatus, slightly modified for children. Two matched groups of 14 children, ranging in age from 9-3 to 16-9 were presented with 96 object-quality discrimination learning problems. After 96 problems, spanning 12 experimental days, the home group had a higher mean number of correct responses than the institutional group and these differences were significant at the .01 level.

Kephart, N.C. A method of heightening social adjustment in the institutional group. Amer. J. Orthopsychiatry., 1938, 8, 710-717.

Two groups of boys at Wayne County Training School were observed in order to determine why one was better adjusted, less troublesome and the other group more troublesome at the school. Using Moreno's socio-metric technique, it was observed that one contribution to the group behavior difference was that the adjusted group was more homogeneous and closer knit socially. An experiment was conducted to increase the unity of the unadjusted group. A program of organized activity increased social unity and led to less disruptive behavior. In the five months after the initiation of the program disruptive incidents reported to the administration showed a significant reduction.

Kinney, Carolyn. A program for reducing maladjustment in an institutional group. Amer. J. Ment. Def., 1947, 52, 78-84.

A description of a program for mentally retarded institutional residents based on socialization and recognition of individual needs and differences in reducing the incidence of maladjustment. Specific factors considered pertinent to adjustment were a relaxed atmosphere, initiating a home environment, limited restrictions, individual educational guidance, a co-educational program, and a program of community contacts.

Kolstoe, O.P. The employment evaluation of the mentally retarded. In: Work Evaluation and Employment Preparation Services for Mentally Retarded Adults. Washington, D.C., Goodwill Industries of America, Inc., 1961, 47-50.

The employment evaluation and training program was started in the fall of 1957 at Carbondale, Illinois and had just finished its third year of operation at the time of this report. This program was an 18-week residential program designed to provide for a systematic observation of the intellectual, personal, social and vocational skills of mentally handicapped adolescents in order that these skills could be analyzed for predicting the employability of this group. The first three weeks(Vocational Evaluation and Testing) provided for the systematic observation and recording of the skills of each individual on 28 basic tasks and tests designed to identify their skills. The next fifteen weeks(Vocational Adjustment Training) consisted of supervised work experience in five different jobs for three weeks each in business establishments in the Carbondale area. In an attempt to identify factors which appear to have some relationship to employability, a group of 84 trainees who had had the same kind of treatment during their stay at the Project was selected, 42 who secured employment, and 42 who remained unemployed. As compared with the unemployed group, the employed group came from homes which encouraged initiative and responsibility for their own behavior. They were generally in good health and were not difficult to look at. They seemed to have good social graces in that they were able to mix well with the other employees and with the employer and they seemed able to concentrate their energies on the tasks at hand.

Krishef, C.H. The influence of rural-urban environments upon the adjustment of discharges from the Owatonna State School. Amer. J. Ment. Def., 1959, 63, 860-865.

Study of specific variables which may be determinants of successful or unsuccessful post-institutional adjustment. Results indicated that more mental retards were able to adjust successfully in rural than in urban areas. Also those wards who had work assignments in the institution were more likely to adjust successfully in the community. Fewer wards adjust successfully who had been behavior problems. Of those wards who adjusted successfuly in rural communities it was found that most of them had longer institutional stays and had help from a social agency in planning the discharge.

Kruger, D.H. Trends in service employment: Implications for the educable mentally retarded. Except. Child., 1963, 30, 167-172.

A discussion of the development of the labor market and its implications for employment of the mentally retarded. Emphasis was placed on a knowledge of the community's particular labor market as an essential factor for effective placement. Through such knowledge, appropriate curricula can be developed to facilitate the employment of the educable mentally retarded students, especially in skill development.

Madison, H.L. Work placement success for the mentally retarded. Amer. J. Ment. Def., 1964, 69, 50-53.

An analysis of relationships between success of outside work placements of mental defectives and 34 variables classified from patients' records. Family characteristics, medical history, behavior problems, education and training were not significant. Classification into middle-grade vs high-grade borderline was significant. Professional staff agreement concerning suitability for work placement, as well as family contact during the work placement were significant. Duration of work placement was highly significant indicating that if failure was to occur, it would occur rapidly.

Magaw, D.C. and Sullivan, S.C. Relationship of specialized vocational training and community adjustment in higher-grade mentally defective boys. Amer. J. Ment. Def., 1945, 49, 383-387.

Factors present in the training of boys for successful vocational adjustment which were lacking in the training of boys with unsuccessful adjustment. Successful vocational adjustment was found to be related to a wide variety of occupational experiences during training, increased personal relationships with others and participating in prepared community appearances such as a Fair Exhibition.

Marchand, J.G. Changes of psychometric test results in mental defective employment care patients. Amer. J. Ment. Def., 1956, 60, 852-859

A report of changes in the measurable mental functioning of 123 patients from Newark State School before and after outside employment experiences. 88% of the patients attained high I.Q.'s after having outside employment experiences. Sex differences were not significant. Differences were noted in drives, attitudes and facades consistent with positive development or regression. In contrast to the average "rise" of =9.2 I.Q. points gained by the survey group of 123 patients, a control group of 10 male and 10 female patients attained an average fall of 1.4 I.Q. points.

Michal-Smith, Harold I. "Personality training in vocational education for the retarded child." Except. Child., 1951, 17, 108-110.

List of 15 personality traits and their relative importance in four work situations(manual, repetitive, machine, social) as indicated by 200 personnel directors.

Mullen, Frances, Itkin, W., and Brauer, I. Personality and social background factors related to the achievement and adjustment of educable mentally handicapped children: A report on a preliminary study. Amer. J. Ment. Def., 1958, 63, 1046-1058.

A study of background factors related to the achievement and to the successful adjustment of educable mentally handicapped children of Chicago. Factors found to be related to successful achievement were mental age, chronological age, I.Q., parental occupation and children with previous school experience in the rural South. Adjustment ratings were found to be related to sex and to community socio-economic status.

Neff, Walter. The rehabilitation workshop as a therapeutic medium, The Workshop--A Dynamic Rehabilitation Tool, Monograph No. 2, Jewish Vocational Service Chicago, Ill., 1959.

The Vocational Adjustment Center of the Chicago Jewish Vocational Service is a rehabilitation workshop designed to facilitate vocational adjustment of employables. Being vocationally disabled can be looked at psychologically as inability of the ego to develop appropriate work strategies; thus the task of the therapeutic workshop is to strengthen the ego so it can cope with the demands made of it. The workshop resembles competitive employment in working conditions, having an employer, foreman, co-workers, and contract work. The workshop serves as a school in which client can learn the role of a worker and abandon inappropriate work attitudes by acquiring more suitable ones. It allows the client to test the reality of what it means to work without being fired.

O'Connor, N. and Claridge, G. The effect of goal-setting and encouragement of the performances of imbecile men. Quart. Jour. Exper. Psychol., 1955, 7, 37-45.

A refinement of the studies by Gordon, O'Connor, and Tizard(1954, 1955) in order to make a clearer distinction between encouragement conditions and goal conditions in relation to effects of self-competition. Forty males classified as imbeciles, who had all served as subjects in the Gordon et ali.study one year earlier either in the control or goal group were tested under three conditions: 1) goal with emcouragement; 2) goal with indifference; 3) control. The subjects who one year earlier had served as the goal group retained superiority over the control group. Those subjects with an initially high level of performance showed an increase in performance under both goal conditions but not in the control condition. Those with initial low level of performance increased only in goal-encouragement and not in the other two conditions.

Patterson, R.G. Coordinates of "popularity" of institutional work supervisors. Amer. J. Ment. Def., 1962, 67, 29-32.

No significant relationship was found between the "popularity" of institutional work supervisors as rated by 109 mildly retarded adolescent trainees at an institution and such variables as the work supervisors' educational level, knowledge of retardation and length of time worked with mental retardates. Intuitive inspection of the most popular supervisors revealed that they were characterized as patient, indulgent individuals, less hampered by production schedules. Question was raised as to whether this type of individual makes the greatest contribution toward habilitating the retardates for community employment.

Pero, J.E. Social oritentation method of social training in an institution. Amer. J. Ment. Def., 1955, 60, 390-396.

The effectiveness of social orientation classes as a method of social training at State Home and Training School, Wheatridge, Colorado. The classes were conducted for the purpose of teaching and training students to make satisfactory social adjustments within the institution and in the community should the students be released on a placement basis. Statistical data are not presented, but the following results are reported. After three years of operation, students acquired ability to solve personal problems without the aid of an employee; improvements were evident in conduct and behavior within the institution; and students learned self-control, respect for property of others, personal contentment, increased work interests, more efficient work habits, self confidence, emotional stability and better human relationships.

Peters, R.B. The role of the institution academic school in the rehabilitation of the mentally retarded. Amer. J. Ment. Def., 1958, 63, 506-510.

A study of the role of the institution academic school in the rehabilitation of mental retards classified as morons. Information was obtained from 550 case records of morons in the Academic School of Rome State School from 1945 to 1953. At the conclusion of the study 64 of the 550 cases had been discharged from the academic school, with one readmitted.

In the institution as a whole during the same time span there were 793 morons discharged compared to 1124 new admissions; 64 were readmitted for more training. On the basis of ratio and re-admittance, the ratio against return to the institution for those who attended the school was 64 to 1 as compared to 12.3 to 1 for those who attended the institution as a whole. It was believed that all of the "moron" classification would eventually return to community life, and that training in the academic school assisted this process.

Phelps, William R. Attitudes related to the employment of the mentally retarded. Amer. J. Ment. Def., January, 1965, 575-585.

Two hundred and fifty-seven service employers selected at random in West Virginia were surveyed by an attitudinal questionnaire. This study was concerned with employers' attitudes toward the mentally retarded, as well as devising a means of measuring these attitudes. Respondents were one hundred thirty-two service employers. Results indicated that hospital and motel personnel managers were more favorable to hiring rehabilitated mentally retarded persons than hotel, laundry-dry cleaners, restaurant and nursing home personnel managers. There was a positive relationship between the educational level of the personnel managers and favorable attitude responses toward the mentally retarded. There was also a positive relationship between the length of time on the job and length of time with the organization and the size of the organization in regard to a favorable attitude toward the mentally retarded. The majority of all personnel managers indicated that the mentally retarded could do productive work.

Rautman, A.L. The mental hygiene of institutionalized mental defectives. Ment. Hyg., 1943, 27, 446-456.

A discussion of predominant physical, social and emotional needs of institutionalized mental defectives. The goal of physical training is to enable the retardate to use his abilities to the best possible advantage. The author states that since the progress of physical training is limited by lack of native capacity, the area of emotional training is the only training where apreciable improvement is possible. Socialization training is based primarily upon establishing socially acceptable emotional patterns. The amount of training in all three areas is determined by the degree of defect in the mental retard.

Rudolf, G. DeM. Improvement in mental defectives in colonies. J. Ment. Sci. 1950, 96, 272-275.

Ratings of improvement were classified according to four aspects: general behavior, personal habits, work and recreation. On basis of these ratings subjects were grouped as "improving," "stationary," or "deteriorating." Records were compiled at two different periods six months apart. Results showed that improvements in general behavior and in work occurred more often than improvement in habits and recreation. Improvement in all four aspects was rare.

Seidenfeld, M.A. Mental retardation, rehabilitation process and environment. In: Oster, J.(ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

Parents encounter a variety of problems in dealing with their retarded child. The only clinically sound way to overcome these problems is through the provision of counseling, guidance, or psychotherapy. This should also be considered with siblings of the retarded child.

Parental attitudes can become the most important factor in successful occupational placement and work performance; secondary importance is the psychological atmosphere where training occurs. For the latter, pre-training assessment should be made, and training instructors should be of top qualification. Training should also focus on the areas of social adaptation, interpersonal relationships and self-management.

Silverstein, A.B., Shotwell, Anna M. and Fisher, G.M. Cultural factors in the intellectual functioning of the mentally retarded. Amer. J. Ment. Def., 1962, 67, 396-401.

A comparison of performances of 53 Mexican mental retardates on the WAIS with 251 non-Mexican controls. Since two groups differed significantly on chronological age, length of hospitalization and social class, the effects of these variables were controlled statistically, as were the effects of sex. The differences in verbal, performance and Full Scale I.Q.'s between the two groups were relatively small. The author stated that these small differences between the two groups suggest that clinical psychologists should be cautious in making allowances for cultural factors in the intellectual functioning of the mentally retarded.

Speyer, N. Social integration of the mentally handicapped adult. J. Ment. Subnormality, 1964, 10(18), 35-41.

The social integration of the mentally retarded adult into living, working and leisure-time environments was discussed in terms of assessment, improvement, and community acceptance. A social profile was developed to aid in assessment of the three different environments; there are eight possible environmental combinations since the retardate can be in either a sheltered or non-sheltered situation in each setting. Evaluation of the retardate's adaptation to each of the environments was outlined with emphasis upon their interdependence. The professional's task was viewed as threefold: 1) stabilization of the retardate's adaptation to the environments, 2) determination of influence of one environment upon adaptation to the others, and 3) initiation of action when social integration is jeopardized by poor adaptation. With the help of many facilities and services, the goal is to raise the mentally retarded's adaptation level as high as possible for each environment. Service provided for normal persons should be used whenever possible; if not possible, the community should provide sheltered facilities.

Stevenson, H.W. and Snyder, L.C. Performance as a function of the interaction of incentive conditions. J. Pers., 1960, 28, 1-11.

A study of performance in a repetitive motor task in which 90 subjects(mean CA 13.5) were assigned to three equal groups tested under three conditions: reward, punishment, and neutral. Each subject was tested in two 7-minute periods. After the first period each group was subdivided into three groups which were tested under the various incentive conditions during the second 7-minute period. In the first period the average success was higher in the neutral group than in the reward group and lowest in the punishment group. During the second period those who had performed under neutral condition in the first period performed best under the neutral condition, then reward and then punishment. For those who had performed under reward or punishment during the first period, reward, neutral, and punishment were effective in that order on the second phase. This shows that reinforcement during the first period effects the outcome during the second period.

Strauss, A.A. and Kephart, N.C. The rate of mental growth in a constant environment among higher-grade moron and borderline children. Amer. J. Ment. Def., 1939, 14, 137.

A study of the effects of environment on I.Q. in 500 high-grade moron and borderline children as related to clinical factors. 292 of this group were divided into five clinical categories: endogenous, exogenous, psychopathic, mixed, and neglected. An I.Q. was available for all subjects at mean CA of 13.2. Retests were given at a mean interval of 4.72 years with the environment being as approximately the same for all the subjects. Criteria for I.Q. change was ± 3 points. Of the total 500, 41% showed positive change, 33% remained constant and 26% showed negative change. In the five groups: the endogenous group showed mean change of +4.0 points; the mixed group -1.56 points the psychopathic group +5.0 points; the exogenous group -2.54 points and the neglected group was considered to be too small in size to indicate change.

Teska, P.T. Some problems in the adjustment of the mentally handicapped. *J. Consult. Psychol.*, 1947, *11*, 276-280.

A general discussion of the commonly recognized environmental factors which hinder the adjustment of the mentally retarded in the unregulated school and community environment.

Tizard, J. The effects of different types of supervision on the behavior of mental defectives in sheltered workshops. *Amer. J. Ment. Def.*, 1953, *58*, 143-161.

An experiment to determine the effects of three types of supervision, designed as strict, friendly, and laissez faire, upon the productivity and behavior of 36 high-grade defective boys working in three sheltered workshops in a mental deficiency hospital. Three nurses were used as supervisors, each nurse playing each of three roles, and supervising in turn each of the three groups of boys. The experiment lasted for three months, and was divided into three one-month periods. The nurses kept check lists of contacts with the boys, made daily ratings of conduct and quality of work, kept daily diaries and at the end of each month ranked the boys for their industriousness and talkativeness. No great differences were found between the scores of groups working under strict and those under friendly supervision, both of which contrasted strongly with the scores obtained by groups working under laissez-faire supervision. Considerable differences were shown by individual boys in their response to different types of supervision. Under strict supervision, the majority of patients behaved well, but anxious or neurotic patients behaved very badly. Under friendly supervision also, the majority of patients behaved well, but anxious or neurotic patients responded very badly. Under friendly supervision, the majority of patients behaved well though some tough-minded patients took advantage of what they regarded as weakness on the part of the supervisor. Few of the boys were able to work well under laissez-faire supervision, with arguments and quarrelling occurring most frequently. There was little evidence of group morale during the experiment. There was general agreement among the supervisors as to the type of supervision each boy needed, though notable disagreements occurred in some cases.

Walton, D. and Begg, T.L. The effects of incentives on the performance of defective imbeciles. *Brit. J. Psychol.*, 1958, *49*, 49-55.

A study of the effects of incentives on the performance of 48 male defective imbeciles performing under four test conditions: 1) control; 2) goal in which subject could see a record of his performance; 3) competition in which subjects could see own and others records of performances for comparison; 4) encouragement in which subjects saw no record but had continued personal contact and encouragement from the experimentor. The task in which all four groups were tested was the Leg Persistence Test. Variability differences were found among the four groups greater than differences in the means which suggested the effect of the experimental conditions were not the successive trials. The results at each trial for control and competition correlated with results of preceeding trials. Incentive conditions were related to superiority; however, with successive trials the incentive group's performance records deteriorated but never reached the control group's low standard of performance. This deterioration was explained by the indifference of the experimentor in the incentive group's test conditions. Competition and encouragement were better incentives than goal striving.

Wardell, W.R. Adjustment of moron males in a group placement. Amer. J. Ment. Def., 1946, 50, 425-433.

A discussion of the effectiveness of placing mental retards in groups to give them community living and socializing experience and to facilitate supervision No statistical data was presented; however, the author stated that of a group of 26 participating in group placement, 80% made satisfactory adjustment.

Wehrmeijer, J.W. The social integration of the mentally handicapped. In: Oster, J.(ed) International Copenhagen Congress of the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

The author presents a general history of conceptualization of the retardate in society. Presently we recognize the factors that play a role in his existience: his milieu, his work, his recreation. The mental retardate must be trained in three areas: in pace, manual skill and adaptation. Author believes that the correct solution to change in milieu is a residential home made distinctly separate from the work situation. The retardate must become a social being to an even greater extent than he is now permitted to be.

Wyers, R.E. and Tarjan, G. Administrative practices to provide psychiatric care of mental defectives. Amer. J. Ment. Def., 1949, 54, 31-37.

A general discussion of administrative practices in a therapeutically oriented institution for mentally retarded patients. The aim of the institution should not be to make good institutionalized patients but to return them to society, capable of adjusting. Institutional practices which the author believed fostered this goal were more liberty within the institution, increased participation in various social activities through the adaptation of a "rest day" away from regular activities, and allowing the patient to budget his own money and make certain purchases for himself.

VI. PREDICTIVE STUDIES

Baumeister, A.A., Bartlett, C.J. and Hawkins, W.F. Stimulus trace as a predictor of performance. *Amer. J. Ment. Def.*, 1963, *67*, 726-729.

In testing Ellis' Stimulus Trace Theory 30 insitutional mentally retarded were compared with 30 institutional normals. A subtest of the WISC which measures short term memory was used to predict performance on a double alternation task in which subjects had to rely on the previous trial as a cue for the following trial. It was found that the WISC did discriminate between success and failure for the mentally retarded but not for normals.

Bijou, S.W. A genetic study of the diagnostic significance of psychometric patterns. *Amer. J. Ment. Def.*, 1942, *47*, 171-177.

A comparison between four mentally retarded boys who scored higher on Grace Arthur Test than on Binet(high performance group) and four mentally retarded boys who did the reverse(low performance group). All had been in the Training School from 1½ to 6 years at the time of study. It was found that the high performance group had a higher level of "behavior efficiency," more came from lowest socio-economic homes, needed less supervision and showed more improvement under improved conditions than did the low performance group.

Bijou, S.W. An experimental analysis of Arthur Performance Quotients. *J. Consult. Psychol.*, 1942, *6*, 247-252.

A comparison between 35 mentally retarded boys with high Arthur Performance Quotients and 35 with low ones, at the Wayne County Training School. Each boy with high performance Q was paired with one with low performance Q and then three judges decided which was better adjusted. Of those judged to be better adjusted 74% had high P.Q., 17% low P.Q.; high P.Q. group was also consistently better at arithmetic than reading.

Bijou, S.W. Behavior efficiency as a determining factor in the social adjustment of mentally retarded young men. *Jour. Genet. Psych.*, 1944, *65*, 133-145.

A study of the relationship between Behavior Efficiency(Speed-Accuracy-Relevancy in the Pintner-Patterson performance test minus verbal power test score) and social adjustment(rated by two trained judges on five point scale). Subjects were 136 retarded young men paroled four to eight years from training school. Test scores were taken while in school, adjustment ratings at the time of study. Significant relationships were found between Behavior Efficiency Scores and adjustment.

Bordua, D.J. Prediction and Selection of Delinquents. U.S. Dept. of Health, Educ. and Welfare., 1961.

This study is concerned with: (1) the basic logic of prediction and selection and the methods of evaluating prediction and selection instruments, and (2) an attempt by the New York City Youth Board to validate the Glueck Social Prediction Table, and (3) validation of the KD Proneness Scale, a paper and pencil device developed by Kvaraceus.

Bower, W.C. and Switzer, A. Adjustment of the Retarded, A Research and Demonstration Project. Office of Vocational Rehabilitation, Proj. No. 330-C, 1962.

A study of 572 mentally retarded young adults two years after their first job placement. Each was given a battery of psychological tests and an interview to determine the relationships of variables to four criterion measures: vocational adjustment(holding a job for at least a year); job level(determined as being simple or complex by use of the Dictionary of Occupational Titles); social adjustment(Vineland Social Quotient markedly above or below the Stanford-Binet I.Q.), and community adjustment(absence of court record during adult life). It was found that: 15 personality characteristics and environmental factors appeared to be related to vocational success; 4 characteristics appeared to be related to the complexity level of the job; a complex of factors were found related to what was called social adjustment indicating that this was a misnomer and that actually efficient use of intellectual capacity was being measured, and 9 characteristics and factors were found to be related to community adjustment. It was suggested that further study is needed to verify the predictive value of the variables used.

Bronner, A.F. Follow-up studies of mental defectives. Proc. Amer. Assn. Ment. Def., 1933, 57, 258-267.

A predictive study of 189 mentally retarded males and females based on clinician's judgment whether personality characteristics were an asset, liability or unclassifiable. A positive correlation was found with job success based on criteria of regular work and absence of court records. The sample distributed on these criteria: success 53%, failure 21%, doubtful 26%. A relationship found between success and supervision, but no relationship with parental I.Q., racial background, adequacy of home.

Cooperative Vocational Pattern for in-school Mentally Retarded Youth. Occupational Center of Essex County, Inc., Newark, N.J., Project No. RD-1189-P-65, 1965.

A demonstration project involving a coordinated work-study of vocational rehabilitation and special education services for the mentally retarded. A series of work sample items and other measures developed at the Occupational Center of Essex County added to other standardized tests cumulated to a total of 54 variables which were used in pre- and post-testing of educable retarded boys. These 54 variables were called the OCEC Project Test Battery. The program was restricted to 50 boys in their last year at school who were designated as the experimental group. Another group of 50 boys in their last year of school, comparable in age, intelligence and reading and arithmetic achievement were designated as a control group. The control group did not receive service from the Project other than pre- and post-testing with the OCEC Project Test Battery. Results showed that the OCEC Test and Measure Battery, although capable of describing the experimental and control populations adequately, was not able to predict success or the lack of success in employment, community involvement or school graduation.

Earl, C.J.C. A psychograph for morons. J. Abnorm. Soc. Psychol., 1940, 35, 428-448.

A study of 66 mentally retarded males aged 17 to 30 certified under the Mental Deficiency Act were given two verbal and two performance tests(Binet Vocabulary, Oral part of Ballard Absurdities, Kohs Block Design and three Formboards) to determine if they would predict social adjustment. A four-point rating scale ranging from certain-to-succeed to certain-to-fail was compared with the graphic results of the tests. Graphic representations of scores on the tests appear to have a high degree of validity in predicting social adequacy. The best predictions can be made when the four test scores are close together, the next best when performance score is above verbal; when verbal is higher than performance it is a poor prognostic indicator.

An Evaluation Study and Demonstration Work Experience for the Mentally Retarded During Their Last Year in Public School.(Project RD-404-1959-1964) sponsored by the Jewish Vocational Service, Milwaukee, Wisc.

The project was designed to demonstrate co-operative service between the public schools and rehabilitation agencies for serving mentally retarded adolescents who are still in school. Diagnostic procedures consisted of psychological test results, educational records, and social history data which are predictive of success and failure in job placement and adjustment of mentally retarded adults. A total of 319 educable mentally retarded adolescents participated in the project(222 were experimental subjects and 97 were controls). During the course of the project an adjective checklist was devised, the Worker Rating Index, consisting of nine areas on concern in regard to employability. The Workshop supervisors rated each of these concomitant areas on a six-point scale. Analysis showed that the Worker Rating Index discriminated clients who were ready to be staffed for placement at the .05 level of significance. Further investigation is needed to determine the relative contribution of each concomitant area, singly, or in clusters. Clients whose parents actively participated in counseling sessions were found better adjusted to the work environment. Little relationship was found between the statement of the teacher regarding employability and the attainment of rehabilitation status.

Fiske, D.W. Problems in measuring capacity and performance. In: Muthard, J.E.(ed) *Proceedings of the Conference on Pre-Vocational Activities*. State U. of Iowa, 1960, 13-27.

A general discussion of the problems involved in measuring the capacity for performance of an individual. The best way to predict how a person will do on a job is to place him on the job and observe him. In rehabilitation, it is not feasible to try clients out in real job situations. The evaluation procedure used in pre-vocational rehabilitation activities must be as realistic and life-like as possible. It should be designed so that a sample of the client's work is gathered, and this sample is generally typical of how the individual will later perform on the job, and so has maximum predictive value.

Franks, Violet, and Franks, C.M. Classic conditioning procedure as an index of vocational adjustment among mental defectives. *Percept. Motor Skills.*, 1962, *14*, 241-242.

A test of the hypothesis that poor conditioners are unable to adjust adequately to life's demands in the absence of compensatory intelligence. Three groups of retarded females similar in age, I.Q. and physical health were conditioned to the eye-blink using a puff of air as the stimulus. Group 1, consisting of 18 women working on daily license outside of the institution, were found the easiest to condition and hardest to extinguish. Group 2 consisted of 39 women working effectively within the hospital setting. Group 3 consisted of 12 women not on any work assignment who were the most difficult to condition, easiest to extinguish. Combining groups 1 and 2, the acquisition and extinction scores were significantly different from group 3(.01) thus supporting the hypothesis.

Fry, L.M. A predictive measure of work success of high-grade mental defectives. *Amer. J. Ment. Def.*, 1956, *61*, 402-408.

To determine the qualifications necessary for successful work inside and outside the institution, 38 female laundry workers at the Manitoba School for Mental Defectives were studied in respect to age, I.Q., ability, attitudes, personality and satisfactory work experience. A performance efficiency quotient(E.Q.) derived from the Wechsler Performance I.Q. was found to be the best predictor of work success. It was concluded on the basis of a small sample that a performance E.Q. of 60 is minimum for reasonably safe prediction of success in the community.

Gellman, W. Components of vocational adjustment. The Personnel and Guid. Jour., May, 1953.

The Chicago Jewish Vocational Service program is based on these hypotheses: 1) each individual has a characteristic vocational pattern which reflects his personality and the manner in which his needs and desires are incorporated into the work situation: 2) vocational adjustment and personal adjustment may occur independent of each other; 3) individual vocational goals and patterns reflect cultural forces; 4) learning to work is a complex developmental process; 5) adequate job performance is dependent upon the vocational pattern and possession of sufficient ability to meet minimal requirements of job. From these hypotheses this program was developed: 1) vocational counseling and placement focus on vocational plans and vocational adjustment problems; 2) employment counseling designed to promote on-the-job adjustment; 3) a guided work experience program is designed to facilitate the transition to employment and to determine the degree of motivation and ability to work, and 4) a work test center in the workshop is designed to answer questions regarding psychological functioning in work situations.

Gellman, W. and Glaser, N.M. A scale for evaluating and predicting the employability of vocationally handicapped persons. Jewish Vocational Service, Chicago, Ill, Mimeographed report available from Research Director. 1956-1959. Bull. 7.

The Chicago Jewish Vocational Service constructed a scale for predicting employment outcomes for handicapped persons seeking rehabilitation. It consists of three scales of 83 items: one filled out by counselor, one filled out by a psychologist, and one filled out by the workshop foreman. These forms were used on 1,364 subjects from various workshops. Three criteria of employment success were utilized: placement within three months; placement within one year; and maintenance of employment for those placed for three months. Total scale scores were derived for each of the rehabilitation settings. Correlations between these scores and the three criteria of employment success varied from .13 to .49, and were in almost all cases statistically significant beyond the .01 level of confidence. Combination scores based on items that predicted outcomes and multiple regression analysis did not raise any of the correlations appreciably. Overall prediction was thus moderate at best, giving the Scale some limited actuarial usefulness. When the research was about three years old, a follow-up study was conducted in an effort to enhance prediction. It was evident at that time that the total scale would correlate with outcomes only moderately at best, and it was hoped to secure information concerning "failures in prediction." Data was collected in home interviews with 72 former clients who had left the workshop from two to three years prior to the interviews. The major conclusions of the study were: 1) The percentage of persons with high scores who had successful work experiences subsequent to the workshop program remained stable for the three year period. 2) Over a two-to-three year period the employment pattern of clients who achieved high scores tended to stabilize. They either became employed on a regular basis or reverted to their original workless status. 3) When successful high score clients were compared with unsuccessful high score clients, no statistically significant differences were found in level of education, I.Q., or diagnosis. Some trend, although not a significant difference was found for amount of pre-workshop experience, age at entry into the program, and sex. The outstanding differentiation was that of race. Non-whites had significantly less success than white clients.

Guertin, W.H. Differential characteristics of the pseudo-feebleminded. Amer. J. Ment. Def., 1950, 54, 394-398.

Twenty-five patients of the Lincoln State School and Colony(Michigan) who showed marked increase in I.Q. since time of admission and were thus classified as having dull, normal or higher intelligence were compared with a control group by utilization of the matched-pair design. Mean increase in I.Q. for the experimental group was 23.7 points as compared with 3.2 points for the control group. Mental development of the experimental group was significantly more delayed than that of the control group. Poor home circumstances(dependency) and an absence of a familial history of mental deficiency were found more frequently among those showing intellectual improvement. The conclusion drawn from this study was that some cases of apparent mental deficiency are really cases of slow mental maturation created by the under-stimulation of an inadequate home.

Gunzburg, H.C. Earl's moron-battery and social adjustment. Amer. J. Ment. Def., 1959, 64, 92-103.

A follow-up in 1957 of 44 mentally retarded who had taken Earl's Moron Battery six to nine years previous showed that in 39 cases the history of social adjustment(particularly the type of discharge and continued hospitalization) agreed with that predicted by the test. This evidence indicates that the test is of some value in indicating social adjustment.

Jackson, Sue and Butler, A. Prediction of successful community placement of institutionalized retardates. Amer. J. Ment. Def., 1963, 68, 211-217.

A follow-up of 191 institutional mentally retarded females to determine what variables are of value in predicting successful community placement (six months in community without being returned to institution). The results show prediction for success could be based on age, verbal I.Q., residence, remaining with parents until age 5 and submission and compliance to authority.

Klaber, M.M. Prognosis. Ment. Retard., Oct., 1966, 26.

The author takes issue with the use of the term and concept of prognosis in dealing with mental retardation. He suggests that the term is medical and refers primarily to survival and is therefore not particularly appropriate for mental retardation. More appropriate would be "developmental forecast" which would include various developmental aspects and conditions for treatment. Prognostication for a mentally retarded child is a projection of development under favorable circumstances. It should result in a reasonable prediction of functioning. Single predictor variables(such as not residing in an institution) are totally meaningless in terms of individual development and serve to restrict avenues of intervention by the professional worker.

Kolstoe, O.P. An examination of some characteristics which discriminate between employed and non-employed mentally retarded males. Amer. J. Ment. Def., 1961, 66, 472-482.

A comparison between 41 mentally retarded males aged 16 to 40 who succeeded in gaining employment after leaving the Employment Evaluation and Training project and 41 who did not gain employment. Of 91 characteristics relating to background, intellectual, personality, social and vocational skills, the employed group was superior in physical characteristics(better appearance, less clumsy); personality(mood, cheerfulness, cooperation); and work(assembly of parts, sorting, manipulating).

Kolstoe, O.P. Language in Employability. Delivered at a symposium at Univ. of Connecticut, August, 1965.

Kolstoe discusses some of the problems entailed in the study of predictive assessment of mental retardates and in the development of an adequate predictive scale. He cites Jordan's model of determinants of post-school success. Reference to the model indicates that vocational success is some combination of intellectual, conceptual, skill, motivational and communicative characteristics. Kolstoe adds that even if Jordan's model were correct, it is apt to be specific for a specific job and still does not account for environmental (community) demands. Kolstoe suggests an extension of Jordan's model to a three dimensional analysis. One dimension of cells would be the static factors of etiology, socio-economic level, education, age and severity. A second dimension would be the jobs classified by level of complexity. This would require the development of a job analysis scale. The third dimension would be the items of the extended Jordan model, each of which would require the development of some scale-like instrument for its measurement.

Kolstoe, O.P. and Shafter, A.J. Employability predictions for mentally retarded adults: a methodological note. Amer. J. Ment. Def., 1961, 66, 287-289.

This paper stresses the need for an accurate description of jobs already successfully performed by the mentally retarded according to intellectual, personal, social, vocational skills, and training requirements; since: 1) no classification has been made of skills needed to perform specific types of jobs; 2) no definition has been given of what adequate social behavior is; and 3) no studies have checked to see if the level of social skill compensates for deficient I.Q. in some jobs.

Ladas, P.G. Work sample learning rates of the mentally retarded trainee as indicators of production in a work-training center. Personnel Guid. J., 1961, 39, 396-402.

In an effort to examine the extent to which learning performance within an evaluation setting can predict productivity in a work training center, 16 male and 9 female retarded trainees(CA 18-45; I.Q. 48-82) were given three trials on seven standardized timed tasks. Subjects were then divided into high and low learning groups after which each was rated by three supervisors as high producer or low producer. The results did not show consistent relationship between learning rate and productivity, indicating that prediction on the basis of work-sample learning can not be made independently of individual personality factors.

Meadow, L. and Greenspan, E. Employability of lower level mental retardates. Amer. J. Ment. Def., 1961, 65, 623-628.

The Detroit Association for Retarded Children selected 10 subjects(Ca 19-31, I.Q. 40-60) who had attended special education classes, and had no previous successful work experience for a pilot study to determine feasibility of vocational rehabilitation for low level mentally retarded. Each subject was given a battery of four tests and a physical and neurological examination before and after spending three months in a workshop where work was subcontracted from industry. It was found that tests alone were not sufficient to predict employability, but that a counselor could make a more accurate appraisal after the three months in the workshop. All subjects appeared to make some gains and eight of them were considered adequate for employment. No report of actual employment success was given.

Merril, M.Q. The relation of mental age to industrial efficiency of a group of mental deficients. J. Delinq., 1925, 9, 83-104.

An analysis of the relation of mentally retarded to industrial efficiency and job difficulty. Subjects were 700 residents of Minnesota School for Feebleminded at Fairbault, working on institutional jobs. Results: in general, correlations between mentally retarded and criterion measures were significant below mental age of eight, but not above. Specifically: 1) number of subjects doing complex tasks increased with mental age; 2) quality of work increased with mental age; 3) efficiency increased with mental age, and efficiency improved at increasing rate to MA=8, at decreasing rate beyond MA=8.

Mueller, M.W. Predictive validity of six psychometric tests of intelligence with young mentally retarded children. (In progress). Abstract. In: Abstract of Peabody Studies in Mental Retardation. 1962-1964, 3(-), Abstract No. 97, 1965.

This monograph reports an investigation of the empirical validity of six general ability tests as predictors of a number of measures of learning. Criteria used were the Wide Range Achievement Tests, Coding Subtest of WISC, a modification of the Prognostic Reading Test, a paired associate learning task and a simple alternation learning task.

O'Connor, N. The prediction of psychological stability and anxiety aggressiveness from a battery of tests administered to a group of high-grade male mental defectives. J. Gen. Psychol., 1952, 46, 3-17.

One hundred four mentally retarded males(mean CA=20.9, no physical defects, I.Q.=50) were studied, employing a battery of tests to determine predictability of stability and anxiety aggressiveness. Stability was rated on a 4-point scale from markedly stable to markedly unstable. Anxiety aggressiveness was rated dichotomously as either anxious or aggressive. The best predictors of stability were postural suggestibility, rail walking and hand dynamometer, with a significant correlation found between stability and intelligence. The Raven Matrices and rail walking tests were best predictors of anxiety aggressiveness. Anxious individuals tended to be less intelligent, more clumsy and more unstable than aggressive individuals.

O'Connor, N. and Tizard, J. Predicting the occupational adequacy of certified mental defectives. Occupat. Psychol., 1951, 25, 205-211.

A follow-up study of 104 male institutionalized mental retardates(mean CA=20.9 no physical handicaps, mean I.Q.=50) with actual work experience made one year after being given a battery of tests to determine predictability of work success and stability of behavior. Stability was rated on 4-point scale from very stable and mature to markedly unstable. Work success was rated on a 7-point scale from all round success on license to unsuccessful in institution workshop(based on past record). The best predictors of work success are stability measures and manual dexterity; others closely related are Body Sway Suggestibility, Rail Test of Ability and Anxiety Rating(which is one of a complex of personality measures derived from: Modified Maudsley Questionnaire, Dominance Rating, Anxiety Rating, Rated Neurosis and unstable history).

O'Connor, N. and Tizard, J. The Social Problem of Mental Deficiency. London. Pergamon Press, 1956.

Study I. A republication of the 1951 article cited above.

Study II. A study of 100 male institutionalized mental retardates with no actual work experience who were given a battery of tests to determine predictability of work success and stability of behavior. A psychiatrist rated stability on a 4-point scale from not neurotic to severely neurotic. Work success was rated on a 8-point scale from suitable for residence license to need for custodial care(based on estimate of work success). The best predictors of work success are Stability Measure and Rated Dominance; others closely related to work success are Anxiety Rating, Diagnosed Neurosis, and level of Psychogalvanic reaction.

Occupational Success of the Retarded: Critical Factors, Predictive Tests and Remedial Techniques. Laradon Hall Occupational Center, Denver, Colo. Progress Report 2, 1964.

Three-year project to develop a predictive battery of tests which would differentiate between the potentially successful and unsuccessful retardate in regard to future employment. It was further hoped that the battery would indicate not only good or poor prognosis but also the reason for it. A preliminary version of a devised Occupational Success Predictive Battery was given to 60 mentally retarded young adults who had employment experience. It was found that the battery could have predicted 80% of the successes and failures. Validation of the battery is currently in progress. From the analysis of data it appears that there is an intellectual dimension of a nature that is not adequately measured by the commonly used intelligence tests. Using Piaget's theory it appears that remediation efforts must be directed to the individual's present level of integration since higher level operations will only confuse him.

Parnicky, J.J. and Kahn, H. (ed) Evaluating and Developing Vocational Potential of Institutionalized Retarded Adolescents. E.R. Johnstone Training and Research Center, Bordentown, N.J., 1963.(VRA-RD-425)

This 4-year study was undertaken to study the pattern of advancement of educable mentally retarded adolescents through a 5-phase vocational training program in the Edward R. Johnstone Training and Research Center. In this program the students(N=437; mean CA=18.5 years, range of 15-25; mean I.Q. during the first year =62, during successive three years =64) progress from academic preparation to vocational evaluation, through on-the-job training into community placement. A prevocational battery of psychological tests and vocational measures was employed as a set of multiple predictors. Ratings obtained during training and placement phases of the program were used as criteria. Special work groups and group counseling were found to be moderately successful in favorably modifying student's behavior. An analysis of test data showed that prediction of success was possible from phase to phase within the training program but was of little value for subsequent employment.

Patterson, C.H. Methods of assessing the vocational adjustment potential of the mentally handicapped. Train. Sch. Bull., 1964, 61, 129-152.

Discussion of the methods of evaluating the vocational potential of the mentally handicapped in regard to four specific areas: cognitive ability, academic achievement, manual skill and dexterity, and personality. In addition to the use of standardized tests of aptitudes, the work samples and work evaluation methods have been applied in a number of studies. The general attitude has been that standardized tests are inadequate, and that the work sample approach is a better method of assessing aptitude. It is questioned whether the brief work sample is useful for the following criticisms: absoluteness of equipment, tasks selected are not representative enough and they are not used for evaluating the above mentioned four factors. Ratings based on prolonged observations in a work setting appear to hold promise for the evaluation of personal-social factors in work adjustment.

Phillips, W. M. The Occupational Factors, Predictive Tests and Remedial Techniques, Second Year Progress Report, Laradon Hall Occupational Center, East Fifty-first Avenue and Lincoln St., Denver, Colorado, 1964.

Study to develop a predictive tool which could differentiate between the potential occupationally successful and unsuccessful retarded more efficiently than existing techniques. It is hoped that this predictive battery will indicate in the case of poor prognosis, why the prognosis is poor. A preliminary version of the Occupational Success Predictive Battery has been constructed and validation has begun. The final report has not yet been completed.

Pickrel, E.W. Prediction of the Trainability of 'Slow Learners' from Tests with a Symbolic and Non-symbolic Content. Air Force Personnel and Training Research Center, Lackland Air Force Base, Texas: Project No. 7703, Task NO. 777078, 1954.

A report of an attempt to predict the trainability of slow learners in the Air Force for jobs in mechanical and clerical areas. Two types of problem solving tests of general ability were used, concrete using pictorial materials, and symbolic using verbal materials. Results were inconclusive.

Pinkard, C. Predicting Vocational Capacity of Retarded Young Adults. MacDonald Train. Center Found., Research Div., Tampa, Florida, 1963.

A three-year demonstration project involving 138 mentally retarded; 101 males and 37 females(I.Q. less than 84; CA 16-30). Subjects were put through a six-week evaluation period during which 50 tests were given, followed by a training period in the workshop. They were then put on full production in the workshop during which they were paid and finally were placed in competitive employment outside of the workshop. It was found that 51 subjects succeeded in competitive employment for six months or more, 65 were functioning adequately in the workshop, and 22 were in a work activity group having been dropped from the workshop because of inadequate functioning after nine months. The I.Q. of the work activity group was significantly below that of the other two groups but there was no significant difference between the I.Q.'s of the two employed groups. A Vocational Capacity Scale was developed out of the 50 tests originally given. It was found that 8 of these tests could predict the employment status of the mentally retarded subjects after nine months of training. These tests were Work Habits Rating Scale, Manual Skill Assembly Test, Physical Capacity Rating Scale, Vineland Social Maturity, General Health Rating Scale, arithmetic section of Wide Range Achievement Test, Discrimination Assembly Test to determine motivation and the Wells Concrete Direction Test.

Porteus, S.D. Study of Personality of Defectives with a Social Rating Scale. Publ. of the Train. Sch. at Vineland, New Jersey, No. 23, 1920.

Study to devise a scale from which social inefficiency among feebleminded individuals could be predicted. A systematic study of the personality of defectives was accomplished by using a social rating scale. A list of traits were found which appeared to adversely affect social fitness. Subjects were rated on this list. Social adjustment related to ability for self-support, self-management and self-control. The scale included those traits which measure social sufficiency rather than social efficiency. Ratings were compared with results of the Binet and Porteus.

Reynolds, M.C. and Maceachern, D.G. The prediction of the adult status of high-grade mental defectives. In: M.E. Wright and H.T. Croley,(eds), Research in the Management of the Mentally Retarded Child. Winfield, Kansas, Winfield State Train. Sch., 1956, 175-193.

A follow-up and comparison of two groups of mentally retarded(340 discharged from 1945-1952 and 131 discharged from 1952-1955) at least two years after discharge from Owatonna State School in Minnesota. Each individual was rated as favorably adjusted if still in the community and unfavorably adjusted if in another institution(about 50% of each group were rated as adjusted). The findings were: neither group revealed significant relationships between sex and adjustment or between sige of home community and adjustment; 70% of families of both groups had records of previous mental retardation; home situation and I.Q. distribution were similar for the two groups; unfavorable adjustment was related to I.Q.s 35-54 and favorable adjustment to I.Q.s 65-84; institutionalization and reported delinquency and physical defects appear related to later adjustment. Those with low I.Q. classified as 'non-familial', having early signs of 'behavior problems' and coming from intact families are more likely to be unable to adjust than are those without these characteristics.

Roberts, A.D. Intelligence and performance test patterns among older mental defectives. Amer. J. Ment. Def., 1945, 49, 300-303.

To test Bijou's hypothesis that having a performance quotient(PQ) higher than the Binet I.Q. is a good prognostic sign, 36 institutionalized mental retards were given the Stanford-Binet, Arthur Performance Scale and the Wechsler Bellevue. It was found that the Wechsler Bellevue is better diagnostic instrument than the Arthur Performance Scale for older mentally retarded.

Shafter, A. Criteria for selecting institutionalized mental defectives for vocational placement. Amer. J. Ment. Def., 1957, 61, 599-616.

Study to determine if the release characteristics currently used in the placement of institutionalized mental defectives do differentiate successful placements. 111 successful placements(complete discharge from Woodward State Hospital and School, Iowa) and 94 unsuccessful placements(returned to hospital) were evaluated. Fifteen release characteristics which were noted by others as differentiating between success of placement were not found significant in this study: poor institutional adjustment, sterilization, frequent job changes, gregariousness within the institution, history of delinquency prior to admission, referral versus admittance directly from home, emotional dependency on home, neuropathic ancestry, birth rank, personal appearance, physical condition, recreational interests, health record, and broken home. Significant release characteristics were: behavior problems, record of escapes, quarrelsome nature, aggressiveness, truthfulness, ambition, obedience, carelessness, records of punishment within five years of time of placement, stealing tendencies and quality of work. Significant sex differences were noted in regard to the predictive validity of certain release characteristics.

Shafter, A.J. Prediction of post-institutional vocational placement achievement. In: M.E. Wright and H.T. Croley (eds) Research in the Management of the Mentally Retarded Child. Winfield, Kansas, Winfield State Train. Sch., 1956, 194-203.

A study of 75 male and 130 female mentally retarded placed vocationally by the Woodward State Hospital and School in Iowa on the recommendation of the staff. A list of 66 characteristics used by different institutions to determine patient release was gathered; of these, 12 were found to differentiate significantly between 111 successful and the 94 unsuccessful; these were: behavior problems, escape, quarrelsome with employees or other patients, fought with other patients, was truthful, ambitious, obedient, careless, punishment record, had stolen, and evaluation of work record during residency. These need future research to ensure that they can predict success.

Sloan, W. Prediction of extramural adjustment of mental defectives by use of the Rorschach test. J. Consult. Psychol., 1948, 12, 303-309.

A comparison of 15 successful(wage earners) and 15 unsuccessful(returned to institution), matched except for number of months on wage placement. All were given the Rorschach to determine factors related to predictability of success. It was found that individual quantitative factors of Beck's system were not predictive. Recoverability from color shock was significantly related in that 13 out of 15 unsuccessful showed poor recoverability and 9 our of 15 successful showed good recoverability.

Snyder, R.T. An investigation of personality variability as a major determiner of the degree of academic attainment among educable retardates. Dissert. Abstr., 1964, 3409.

Groups of low achieving and high achieving mentally retarded adolescents were given the California Test of Personality, the Laurelton Self-Attitude Scale and the Human Figure Drawing Test(scored for anxiety). The high achievers showed superior general, personal and social adjustment, a more wholesome self-attitude and a lower level of anxiety than the low achievers.

Stephens, Will Beth Dodson. Success of Young Adult Retardates. Ph.D. Dissert., Univ. of Texas, 1964.

A cross sectional study of 125 mentally retarded(CA=18-26) with 25 being drawn from each of five settings(four of these groups having received some training) in an effort to determine the relationship between 80 continuous and 61 dichotomous success criterion variables and 78 continuous and dichotomous predictor variables. The criterion success variables were subdivided into factors relating to: to vocational success(earning a living); socio-civic success(obligation to community and desirable community membership); and personal success(self-realization). The predictor variables were: intellectual measures, perceptual-motor measures, family status, psychological measures of personality and environmental conditions of work training program. The 80 continuous success variables reduced to 17 factors not all of which fell into vocational, socio-civic or personal success. The 78 continuous predictor variables reduced to 21 factors. 70 of the 80 criterion variables had loadings that were significantly predicted by predictor variables and 35 of the 61 dichotomous criterion variables were successfully predicted. The Vineland Social Maturity Scale and Peck's Sentence Completion were the most efficient predictor instruments. The four groups that had received training were happier and had better work habits than the group that had not received training.

Taylor, James B. Personality and Ability in the Lower Intellectual Range: A Study of Assessment Methods. Inst. for Soc. Res., Univ. of Wash., Seattle, Washington, VRA-RD-603, 1964.

Taylor deals with the problem of assessment of personality and ability in the lower intellectual range. The study was conducted at Tacoma Wachington Goodwill Industries which has since 1954 operated a Rehabilitation Workshop, offering the services of a vocational diagnostic unit. After the client had been admitted to Goodwill he was administered a battery of 45 tests, 28 of which were taken from standardized tests, while 17 were drawn from tests developed locally. All of these tests were administered during the first two weeks the client spent at Goodwill. For the next two months, clients were rotated throughout the Goodwill plant on various vocational jobs on which they were rated by experienced work supervisors. These ratings of on-the-job behavior served as criterion measures for the predictive test scores. Twenty-one test scores were found to be related to work performance, but a reduced battery of four tests was found equally efficient in prediction. No tests were found significantly related to personality adjustment criteria. There was some indication that clients from institutions and broken homes made better adjustment in this setting than clients living with parents or relatives, or from intact homes.

Taylor, J.B. The structure of ability in the lower intellectual range. Amer. J. Ment. Def., 1964, 68, 766-774.

A summary of the findings of Taylor's study detailed in VRA Project RD 603 cited above.

Thomas, C.W; Spangler, D.P. and Izutsu, S. Some fundamental propositions in the construction of evaluation units in vocational rehabilitation. Person. Guid. J., 1961, 39, 586-589.

A research project was conducted on a residential chronoically disabled population to evaluate clients' abilities through experimental objective methods. Population characteristics included irregular employment history at or below semi-skilled level, low academic achievement, loose family organization, financial support from a welfare program, intellectual capacity in the dull-normal to low-average range and alcoholism. All had employment histories which ranged from sheltered shop placement in the hospital to competitive jobs in the community. Work performance was evaluated by a method called Thomasat which is an experimental technique designed to appraise cognitive-motor functions relevant to jobs performed in the sheltered workshop. Total performance was treated statistically to yield a score designated as "Work Quotient." This measure reflected six equally weighted categories: the ability to learn, the ability to produce, and the number of production rejects, a visual-perceptual organization score, work habits, and independence from supervision ratings.

The split-half reliability coefficient of these categories were 0.92, 0.95, 0.88, 0.96, 0.66, 0.65 respectively, all of which were significant beyond the .01 level of confidence. By correlating the "Work QuotientsQ with quantified ratings of job performance, a validity of .63 was obtained. This coefficient was also significant beyond the .01 level of confidence. Thus, reliability and validity of the "Work Quotient" indicated that the scoring of clients' work capacities was possible by objective methods and that these scores would distribute clients in a meaningful manner along a continuum of work levels from high to low.

Tobias, J. Evaluation of vocational potential of mentally retarded young adults. Train. Sch. Bull., 1960, 56, 122-135.

Author feels that standard I.Q. tests are inadequate for assessment of mental retardation in terms of vocational potential. Thus, a battery of seven subtests representing typical workshop tasks has been devised to provide an appropriate measure. Subjects: N=60, CA 17-25; I.Q. 42-83. Test administered to subjects under typical workshop conditions(not isolated). Evaluation tasks correlated with WAIS I.Q.'s in the range r=.07-r=.43 and with WAIS Full Scale, r=.427. Intercorrelations of evaluation tasks range from r=.08 to r=.56 with average hourly earnings for a month, r=.52(significant). I.Q. correlated with earnings r=.14(not significant).

Tobias, J. The use of psychological tests in vocational planning for retarded adults, 1961 Conference on Psychological Services in the Habilitation of the Mentally Retarded. The Training School at Vineland, N.J., Sept., 25-26, 1961.

Workshop Evaluation Tests--a standard series of work tasks--yielded a product moment correlation coefficient of .52 with piece-rate wages in a sheltered workshop. Significant correlations were also found between wages and Purdue Peg Board, Goodenough Draw-a-Man, and WAIS Performance scores. WAIS Verbal Scale and PPVT were least related to productivity and efficiency.

Tobias, J. and Gorelick, J. The effectiveness of the Purdue Peg Board in evaluating work potential of retarded adults. Train. Sch. Bull., 1960, 57, 94-103.

The Purdue Peg Board was administered to 81 mentally retarded adults referred to workshop because of inability to make vocational adjustment. Results showed a significant relationship between Purdue Peg Board and WAIS I.Q. and a significant relation between the Peg Board and production tasks (ballpoint pen assembly, wire clamp assembly, etc.). The Purdue Peg Board was found superior to the WAIS in predicting productivity in workshop and was more effective in predicting the productivity of mentally retarded than of normal subjects.

Voelker, P.H. The value of certain selected factors in predicting early post-school employment for white educable mentally retarded males. Dissert. Abstr., 1962, 23(3), 3243.

Study of selected factors in predicting post-school for white educable mentally retarded males in which 24 boys employed 70% of the time were compared to 20 boys employed 30% of the time. Significant differences were found in reading grade level, arithmetic grade level, combined teacher ratings of certain personality traits, "over-all adjustment" to the special education program and continuity of home life. No differences were found in I.Q., combined teacher ratings on school shop work, truancy from school, socio-economic level of residence, general "prediction ratings" on probability of making good post-school adjustment to community.

Wagner, E. E. and Hawver, D.A. Correlations between psychological tests and sheltered workshop performance for severely retarded adults. Amer. J. Ment. Def., 1965, 69(5), 685-691.

Eight psychological tests, administrred on a concurrent basis correlated significantly with the ranking of workshop success for 27 severely retarded adults. The eight tests were: 1) O'Connor Finger Dexterity Test; 2) O'Connor Tweezer Dexterity Test; 3) Minnesota Rate of Manipulation Placing; 4) Minnesota Rate of Manipulation Turning; 5) The Active Score of the Hand Test; 6) Goodenough-Harris Draw-a-Man; 7) Bender Visual-Motor Gestalt Test; and 8) Stanford-Binet I.Q. The criterion of success was the overall ranking by the chief instructor according to: 1) respect for authority and willingness to take directions; 2) generally completes assignments and work is of good quality; 3) seems to get along reasonably well with co-workers, and 4) learns new workshop skills without too much difficulty. Most of the Spearman Rho correlations were high; the Bender-Gestalt alone correlated .89 with the criterion. Results were tentatively interpreted as indicating a general intactness factor in low grade mental deficients.

Warren, F.G. Ratings of employed and unemployed mentally handicapped males on personality and work factors. Amer. J. Ment. Def., 1961, 65, 629-633.

A study of 38 mentally retarded males placed on different jobs for three-week periods by the Employment Evaluation and Training Project of Southern Illinois University. After each job the employer filled out a rating form on each employee. Later the subjects were split into an employed group(27) if they found a job within one month after leaving project and an unemployed group(11) if they did not. Significant differences were found between employed and unemployed on 11 specific factors on the rating scale: self confidence, cheerfulness, cooperation with supervisor and other employers, respect for supervisor, minding own business, mixing socially, completing work on time, quality of work, understanding work and initiative.

Windle, C.D. Prognosis of mental subnormals. Monog. Suppl. Amer. J. Ment. Def., 1962, 180.

This report on the population movement of mental defectives at Pacific State Hospital consists of a compilation of research results, data and ideas on prognosis in mental retardation. Some factors which seem to be important for institutional release and/or post-institutional success are: age of admission(between 10 and 20 is best); age at time of release; preadmission delinquency; having a familial or undifferentiated diagnosis rather than specific clinical disorders; intelligence, superior performance to verbal scores on I.Q. test; some types of psychomotor ability; personality; working ability and work experience; adverse preadmission home environment; favorable home for release; and institutional approval for release. Factors which seem unimportant or are undetermined are: sex, physical defects; outcome of therapy; length of institutionalization; sterilization; psychiatric treatment; and family interest. Few cross validation studies to determine a prognostic index have been carried out.

VII. TRENDS IN TRAINING

Bartl, B. Detroit Special Education-Vocational Rehabilitation Project, 1962.

The purpose of the Detroit Special Education-Vocational Rehabilitation Project was to develop employability and vocational success among a sample of least employable youth. By combining and integrating an expanded public school special education project, an intensified demonstration program was designed. In planning for the intended work experience it appeared that on-the-job training, the evaluations made of the subjects' performance in an actual work setting(job-try-out) were the most promising as a gauge of employability and employment potential.

Beard, R.J. Industrial therapy with mental defectives. Amer. J. Ment. Def., 1953, 57, 547-553.

A discussion, lacking quantified data of the effects of a program of "industrial therapy" on a group of institutional residents. It points to increase in recommendations for outside employment, increase in quantity and quality of output, decrease in patient disciplinary cases and a higher level of institutional adjustment.

Bergman, J., Bethel, J., Pratt, R. and Lavis, L.W. A community focused institutional approach to mental retardation. Amer. J. Ment. Def., 1962, 67, 94-100.

In 1960, the Glenwood State School(Iowa) developed the Community Services Program to improve the school's ability to move patients out and to admit applicants in need of institutional care. The basic concepts underlying the program were: 1) the retarded person has much in common with nórmals; 2) the family, church, and community should provide for the retarded; 3) state institutions should provide treatment, education and training programs which cannot be provided on a local level; 4) specialized services for the retarded are only as effective as are the services upon which they depend; 5) state institutions should assume a role of active leadership in program development within the state; and 6) cooperation between related services and interests is essential for the development of a well integrated program. The qualified Community Consultants were hired to stimulate interest, cooperation and coordination between the institution and the community. From July, 1960 until January 1, 1962, 305 patients had been returned from the institution into the local community and those patients who have been placed in local facilities have made better adjustments than were anticipated.

Clarke, A.D.B. The abilities and trainability of imbeciles. In: Clarke, A.M. and A.D.B. Mental Deficiency - The Changing Outlook. Glencoe, Ill., Free Press, 1958, 309-333.

Until very recently learning in imbeciles was neglected. However, it has been shown that imbeciles can do remunerative work in a sheltered situation and a few are even able to hold jobs in the competitive market. Some of the principles for training imbeciles are: to present suitable incentives; break down the work into the simplest steps; correct all errors from the beginning of training on; space the learning trials; provide over-learning of tasks; provide verbal reinforcement; stress accuracy first and speed later; and arrange materials to minimize fumbling.

Cohen, J.S. and Williams, C.E. A five-phase vocational training program in a residential school. Amer. J. Ment. Def., 1962, 66, 230-237.

A discussion of areas to be included in vocational training programs for mentally retarded students in residence schools. It should provide sequential, structural, and realistic vocational experience and should emphasize the development of non-specific skills required on most jobs(interpersonal relations, etc.). Implementation of the program can occur through these five phases: pre-vocational evaluation; half-day on-campus training; full day on-campus training; day work(work in community but retain residence in school); and extended leave(live and work in community). Counseling is the key to adjustment for the mentally retarded.

Cortazzo, A.D. Increasing sociability for the retarded through activity programs. J. Rehab., 1964, 30(2), 13-14.

Activity programs enhance the personal and social development of individuals who are too handicapped to be acceptable for a sheltered workshop program. These individuals are given an opportunity to participate with others who are similarly handicapped in training and in adjustment to activities of daily living. These programs first act as a buffer against any increase in social isolation and devaluation; second, the individual's self-concept and personality are strengthened; third, positive relationships with peers, family and other adults in the community are developed.

DiMichael, S.G.(ed) Vocational Rehabilitation of the Mentally Retarded. U.S. Govt. Printing Office, U.S. Office of Vocational Rehabilitation, Wash. D.C., 1950, Rehab. Series No. 123.

An early but still classic discussion and outline of the aims and procedures in the rehabilitation of the mentally retarded.

Dubrow, M. Development of Optimum Vocational Potential of Young Mentally Retarded Adults in a Sheltered Workshop Program. Progress Report #3, Feb., 1963.

This is the third project report on a research and demonstration project of VRA on developing the vocational potential of mentally retarded adults in a workshop program carried out at the A.H.R.C. Training Center and Workshop in New York. To be included in the program an individual's primary disability must be mental retardation(I.Q. under 75); age 17 to 30; ability to relate to groups; capable of self-travel with training; ability to communicate; epilepsy and emotional disturbance under control. For persons accepted for training a complete case history will have been gathered along with the administration of a battery of tests. All individuals receive training both for personal adjustment and for vocational adjustment. The program is continuously changing to meet the requirements of the situation. A follow-up was made of 107 trainees who had completed the program between 1957 and 1961. Of these 74 responded by answering the questions asked. A total of 28 were in full-time competitive employment, six were in quasi-sheltered employment, one worked part-time and five were in sheltered workshops, the rest were unemployed.

Dubrow, M. Working for Maturity. Specialized rehabilitation training for mentally retarded adults. New York, AHRC, 1962.

A discussion and description of the aims and methods of the AHRC Sheltered Workshop.

Fraenkel, W.A. Planning the vocational future of the mentally retarded; current trends in community programing. Rehab. Lit., 1961, 22, 98-104.

A review of past attitudes towards and concepts of the mentally retarded and and outline of some current procedures. Interviews, school records, vocational interest and work experience can be used to indicate readiness for employment. To supplement this one might use: Vineland Social Maturity Scale, Interest Tests, personality tests and the General Aptitude Test Battery developed by the U.S. Department of Labor. By coupling these selection methods with vocational rehabilitation and sheltered workshop activities some mentally retarded learn to function independently in unskilled and semi-skilled positions.

Gellman, W. and Friedman, S.B. The workshop as a clinical rehabilitation tool. Rehab. Lit., 1965, 26(2).

This paper reviews briefly factors influencing the shift from terminal workshop to the transitional workshop and from the latter to the psychologically oriented vocational adjustment workshop. It defines this newly emerging vocational adjustment workshop as one in which workshop programs contribute consciously and purposively to the achievement of vocational rehabilitation goals. The workshop's function is to provide work settings, work incentives, and professional staff-personnel relationships that facilitate assessing, improving or maintaining a disabled person's employability level. The use of the workshop as a clinical rehabilitation instrument is reviewed. Seven criteria are suggested for evaluating the use of the workshop as a professional instrument in vocational rehabilitation. One of these is the use of professional personnel as workshop foremen.

Goldberg, I. A survey of the present status of vocational rehabilitation of the mentally retarded residents of state-supported institutions. Amer. J. Ment. Def., 1957, 61, 698-705.

In an effort to determine the present status of vocational training of the mentally retarded, a questionnaire of 25 open-ended questions was sent to each of 93 institutions of which 60 replied. Only three institutions included the words "mentally retarded," "feebleminded," or "mentally deficient" in their title; most institutions had a shortage of employees and the training of these employees was poor; the most common jobs performed by the patients were farm work, laundry work, and kitchen help; patients received little compensation for their work; and most institutions had little or no in-service training program for the personnel carrying out vocational training.

Goodwill Industries Rehabilitation Center, Development of Occupational Evaluation and Training Center for the Mentally Retarded. Project 308, Tacoma, Washington, 1963.

A description of a project which dealt with the development of occupational evaluation and training for the mentally retarded. During the five-year period covered by the project, 157 clients participated. The project population was drawn from throughout the state of Washington and Alaska. The limits of the project were defined as including those with an I.Q. of 75 and below and age between 16 and 30 years. The project procedure consisted of four phases: comprehensive clincial assessment, prevocational evaluation including sampling and work trials, vocational training and job placement. The clinical assessment consisted of a medical assessment, a standard test battery made up of the WAIS, the Bender-Gestalt, and a Figure Drawing test and a social history. The admission policy was flexible; however, if a client could not display some potential for work(either in sheltered or competitive employment) he was not admitted. The prevocational evaluation was a two-month period in which the client was assessed in terms of his current and potential skills as well as ability to function appropriately in a vocational setting. Of the total group who had completed their program 63 percent had been employed for more than three months and were considered rehabilitated.

Gragert, H.T. "Differential Diagnosis, training and job placement for the mentally retarded. J. Rehab., 1962, 28, 35-37.

Article discusses Goodwill Industries vocational evaluation and training program for mentally retarded adolescents and adults with goal of preparing them for gainful employment. Most evaluees were multiply handicapped. Average age-20.5 years; average years in school -7.7(those with secondary special education in background made quicker and more adequate adjustment). Mean I.Q. of evaluees - 68.7; Range -35-98. I.Q. not seen as an effective criterion for valid prognosis. Better criterion appeared to be evaluations based on total personality structure(interviews and projective devices). Common emotional characteristics exhibited: infantilism, dependency, negativism (unconscious) high emotional liability and mood shifts, self-depreciation and feelings of inadequacy, heterosexual immaturity. Several recommendations for training - rehabilitation programs.

Kaluger, G. and Park, L.D. A development program for non-vocational severely handicapped adults. Cerebral Palsy Review. 1964, 25(5), 12-14.

The results of an experimental program designed to develop independence in non-vocational multi-handicapped adults are reported. Four mentally retarded adult whose additional handicaps included C.P., and amputated leg, total blindness, and partial deafness were introduced to the regular program of a workshop for mixed disabilities. The purpose was to develop social maturity, personality, motor control, personal interest, and mental and educational skills. An initial 16-week Phase I evaluation period showed gains in most of the above areas and in work productivity, although this was below shop quota. Phase II was structured to include physical and speech therapy, homemaking skills, leisure activities, and education. After two years, there was a marked improvement in vocational skills; personal and social adjustment had become the "stellar achievement." The implications of this program for adults in a family setting and its possibilities for "total care" institutions are discussed.

Kokaska, C. In-school work experience: A tool for community adjustment. Mental Retardation, 1964, 2(6), 365-369.

In Phoenix(Ariz.) Union High School and Junior College System EMR students are given in-school or campus work experience which helps them to accept responsibilities, exercise judgment, and receive meaningful training and counseling. The student is enrolled in an entire day of classes during the first two years of a four year program which will terminate with a special education diploma. In the junior year, the student attends special education classes in the community which in the final year is increased to full-time employment. The student is assessed through a work readiness form by his "core" teacher and is interviewed by his counselor. The student's performance is evaluated through (1) observance by the counselor, (2) a work experience rating scale completed by the supervisor at least twice a semester, and (3) a conference between counselor and supervisor. Community placement occurs only when the counselor feels that the student is ready for it.

Krahl, L.A. Phoenix Plan for Special Education Students. Goodwill Industries, Phoenix, Arizona, 1965.

The Arizona Division of Vocational Rehabilitation and the Arizona Department of Special Education established in 1964 a special vocational rehabilitation facilities program. Persons eligible for the program must be referred from the Public High School program and 15 years of age or over. A statistical account of project activity as of July 1, 1965 indicates that of the 151 student referrals, 18 are ready for placement in jobs and 68 are already regularly employed. During the course of the project a Work Evaluation Scale was developed. The evaluation staff observes the client's behavior during his period of activity in a workshop program. Their observations at that time are then transformed onto the rating scale. The resulting profile is then used in making conclusions regarding the suitability of the client for further vocational or academic training, or job placement. No specific validity norms are presented for the WES.

Linde, T. Social development for trainable retardates. Rehab. Record. 1963, 4, 24-27.

A description of a social development program at Milwaukee. The program operates 4½ days each week, 11 months a year. At the time of this article 43 clients were enrolled with mean age of 25.7 years. Mental ability was measured by means of the Ammons and Ammons Quick Test. Data from this test indicated the mean I.Q. was 45. Acceptance into the program was based on staff evaluation, with I.Q. scores interpreted liberally.

Linde, T. Techniques for establishing motivation through operant conditioning. Amer. J. Ment. Def., 1962, 67, 437-440.

A discussion of useful approaches for achieving motivated behavior utilizing the operant condition paradigm in a workshop situation for the mentally retarded. A desired activity pattern is linked to a reward which will reinforce it. Motivating the retarded in workshops necessitates teaching the notion that a specific behavior, work, will be rewarded.

Moed, M.G. Procedures and practices in pre-vocational evaluation: a review of current programs. In: Muthard, J.E.(ed) Proceedings of the Conference on Pre-Vocational Activities. State Univ. of Iowa, 1960, 1-2.

A review of methods for pre-vocational appraisal: 1) work sample gives the evaluator an opportunity to compare the performance of the handicapped individual with the performance of the successfully employed; 2) sheltered workshop performance provides an assessment of vocational potential; 3) psychological aptitude tests of the past are unsuitable for application to the handicapped; so new methods are being devised; 4) engineering approach is attempting to develop a work sample system on the most common physical motions involved in typical semi-skilled jobs; and 5) patient employee evaluation in which a supervisor in occupational therapy evaluates the individual's abilities. Some examples of programs utilizing combinations of these methods are cited.

Muskin, C.L. Manual of Procedures for the Vocational Training Center of the Association for the Help of Retarded Children, Inc., Nassau County Chapter AHRC, Monograph Series No. 1, New York, N.Y., 1964.

One of the purposes of the AHRC Vocational Training Center and Workshop is to screen candidates for vocational rehabilitation. The evaluation period requires four to six weeks to complete the total testing experience. The service has been divided into two phases. The purpose of the psychological work-up is to understand the client in terms of intellectual functioning, mental processes, and basic personality structure. Individual testing methods are employed and geared to the following: 1) level of intellectual functioning and academic achievement; 2) capacity to learn, retain, and recall learned experiences; 3) assessment of psychomotor abilities, speed and efficiency; 4) ability to communicate and level of comprehension; 5) basic personality structure in terms of relating to environment; 6) interest level and motivation. The aim of the vocational evaluation is to gain insight into the client's ability to adapt to groups and apply himself to a work experience. This evaluation focuses on the client's responses and behavior in the following situations: 1) when required to accept independence; 2) when adjusting to work and applying skills; 3) when caring for and using simple manual tools; 4) when adapting to automatic equipment; 5) when observing and following the basic rules of industrial safety; 6) when accepting supervision and criticism.

Parnicky, J.J. The newly graduated retardate. Rehab. Record., May-June, 1964.

"Counseling services should be available to retarded individuals at times when critical decisions in their lives have to be made." Reasons presented for follow-up services for the newly graduated retardate are: 1) little is known about the actual experience these individuals face upon leaving the training center, the adjustments they are required to make and the feelings they have during the early weeks of community living and job placement; 2) studies such as the analysis of population movement conducted by Windle at Pacific State Hospital show that different factors may be critical for success in different types of community placement; 3) O'Connor and Tizard indicate that part of the difficulty in establishing prognostic determiners is the great variety of circumstances which lie outside the field of psychological and psychometric studies; 4) a series of studies have indicated that emotional instability or neurosis and work capacity are related; 5) for the community and the family, the entry of the retarded graduate into new circles of activity--the job world, the leisure time world--also poses the necessity of adjustment, accommodations and acceptance. To bridge the gap between training and employment, as well as other gaps in the retardate's life, Parnicky advocates the implementation of the concept of "continuum of care" through inter-disciplinary services.

Peck, J.R. The Marbridge Plan: a Texas experiment in habilitation of mentally retarded youth. Except. Child., 1957-1958, 24, 346.

The Marbridge Foundation of Austin, Texas, was founded to provide habilitation for males who meet these criteria: aged 16 to 30; I.Q. of 50 to 80; social quotient below average; low academic performance; free from chronic disease; no history of delinquency; and a prognosis for successful placement in one to two years. A ranch setting is provided and the work day consists of various activities such as stock management, milking, care of poultry and kitchen duty. The trainees are rotated to a different position every two months. Special education in agriculture, leathercraft, ceramics, industrial arts and care of belongings is provided. To graduate to outside placement, where an individual is followed up by a counselor depends on vocational proficiency, physical health, social adjustment, personal care and appearance, mental maturity, acceptable use of leisure time, emotional stability and adequacy of practical information. Brief case histories of 67 individuals are provided.

Report of Special on-the-job training for mentally retarded youth and adults. Children's Health Home for Mentally Retarded Children and Adults, Inc., San Mateo, Calif., 1965.

In 1964 the Children's Health Home for Mentally Retarded Children and Adults, Inc., of San Mateo, California, began a project to provide basic pre-vocational skill training for 18 mentally retarded youth. The program provided such abilities as basic work skills, motivation, work tolerance, and social and emotional adjustment. Assessment procedures included both objective and subjective data relating to the trainee's intellectual, personal-social, behavioral, and vocational potentials. Routinely, the WAIS and the Purdue Peg Board Test were given. In addition where indicated the Seguin Form Board, the Peabody Picture Vocabulary Test, the Bender Visual Motor Gestalt Test and the Rorschach Inkblots were administered. The duration of the project was ten months. Training was provided in various subcontract jobs and all workers included in the project made some improvement. No evidence was given regarding the specific predictive assessment value of the tests administered.

Ricker, L.H. and Pinkard, D.M.C. Three approaches to group counseling involving motion pictures with mentally retarded adults. In: Oster, J.(ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964, 714-717.

Group counseling produced a more realistic self-appraisal and improved social sensitivity. Three types of groups were organized. In one the subjects were confronted with their own behavior in a group of their peers through motion picture playback; the second group received counseling without audiovisual aid; the third group received counseling with films showing mentally retarded people like themselves in age and ability. A test battery was used for pre- and post-evaluation of individuals. Several trends are suggested by the raw data: all groups showed improvements in intellectual performance with the greatest gains in the visual playback group; and all groups moved in the direction of more critical self-appraisal, increased self-control and more frank expression of their feelings towards other group members.

Ringelheim, D. and Polatsek, I. Group therapy with a male defective group: a preliminary study. Amer. J. Ment. Def., 1955, 60, 157-162.

A pilot study of group therapy with seven male institutionalized mentally retarded, CA 17 to 39, diagnosed as "personality disorders" in which thirty one-hour therapy sessions were held over a seven month period. Follow-up revealed little observable change in personality dynamics or mental level: but therapy did provide the individuals with an outlet for emotional release, support and practice in interpersonal relations. For this reason authors feel therapy should be employed in the institutional programs.

Rotberg, J., Cicenia, E.F. and Bogatz, B.E. A residential school program preparing educable retardates for on-the-job training. Ment. Retard., 1965, (Oct.) 10-14.

A description of the Prevocational Orientation Program at the Johnstone Training Center, Bordentown, New Jersey. The Five-Phase Vocational Training Program consists of 1) pre-vocational evaluation; 2) half-day on-campus vocational training; 3) full day on-campus vocational training; 4) day work, off-campus vocational training with pay, and 5) job placement and residence in community.

Schmidt, P, Arnholter, E. and Warner, M. A Work Adjustment Program for Disabled Persons with Emotional Problems. (Project No. RD 275), Indianapolis, 1962.

The project consisted of three special rehabilitation sequences: 1) four-week experience of numerous trials on different jobs, titled "Vocational Evaluation" 2) a work program for persons lacking emotional tolerance for work, titled "Work Adjustment," and 3) extended training on a specific job, titled "Vocational Training." An assessment of work personality was considered indicative of employability. The areas of personality assessed by supervisory ratings were interpersonal relations, utilization of ability, work satisfaction, adjustment to work pressure, self-concept as a worker. Employability was the capacity to engage in productive work. It was specifically related to job skill and work personality. Placability reflected an individual's ability to obtain a job in the labor market. The project placement counselor found that disfigurements, speech impairment, illiteracy, facial tics, and athetoid movements of head, arms or legs, were psychological hindrances to an employer's acceptance of handicapped individuals, even when they had the skills and work personality to hold a job. Three rating scales were available, a Counseling Scale for completion by the caseworker at the time of intake, with predictions based on the social, educational and employment backgrounds of a client, a Workshop Employability Rating Scale, for completion by the Industrial supervisors at three, seven, eight and twelve-week intervals, and a Follow-up Scale for completion by the placement counselor at each quarter of the Follow-up period.

Schumacher, F.A. and Townsell, J.D. Training mentally retarded for employment. Rehab. Rec., 1960, 1, 24-29.

A resumé of the history to 1960 of programs concerning vocational rehabilitation of the mentally retarded under PL 54-565 and sponsored by units of NARC in the United States.

Sharkey, F.E., Jr. Industrial education for the mentally retarded. Digest of the Mentally Retarded, 1964, 1(2), 75-79.

The importance of industrial education for the mentally retarded and the relationship of such training to educational goals were described. These goals focus on social competency, vocational independence, good health habits, minimum academic skills, leisure time activities, and family and community membership. The five-level industrial program for EMR at Illinois State University was described. It encompasses the entire school years; and at the upper levels, it involves pre-vocational training and a three-year diversified occupations program which places the student on a number of jobs as a final test of competency and interest. The article concluded with a 17-item list which suggested adaptations of a regular high school industrial arts program for use with EMR youngsters.

Shawn, B. Review of a work-experience program. Ment. Retard., 1964, 2(6) 360-364.

In Albany(N.Y.) schools, the first four years of the work experience program for EMR youth has involved 37 youth from 17 to 21 with an I.Q. range of 50-75. Job stations have included sign painting, different food services, library, laundries, florist shop, gas stations, grocery store, furniture upholstery and others. Each youth was assigned for a full school year to one job experience, with three or four hours in the mornings being spent on the job and the afternoon spent in classes and counseling. Reimbursement to the employers from the Division of Vocational Rehabilitation was full for the first 13 weeks, and was then scaled down to 3/4 and 1/2 for the next two periods, respectively. At the termination of the school year, employers were requested to retain the youth assigned to them as permanent employees without any reimbursement from DVR. Seventy of seventy-five percent of the trainees have been retained. Those youth who later lost their jobs did so because of lack of ability to establish personal relationships, rather than inability to perform job skills.

Shotwell, Anna M. Effectiveness of institutional training of high-grade mentally defective girls. Amer. J. Ment. Def., 1949, 53, 432.

A study of the effectiveness of institutional training of 31 high-grade mentally defective girls over a three year period. Results showed that 42% of the subjects were rehabilitated. The duration of institutionalization for the rehabilitated subjects was from nine months to four years, five months. No control measures were reported.

Snyder, R. and Sechrest, L. An experimental study of directive group therapy with defective delinquents. Amer. J. Ment. Def., 1959, 64, 117-123.

A study of the effects of directive group therapy with institutionalized mentally retarded delinquent males was carried out at the Huntington, Pennsylvania Institution for Defective Delinquents. A therapy group, a placebo group, and a control group consisting of 9 Caucasians and 9 Negros each were used. After 13 weeks(during which the therapy group received 13 hours of therapy and the placebo group had 13 hours of meetings, all the subjects' records were checked. It was found that the therapy group had received more positive comments on a rating filled out by the ward charges than did the placebo or control groups(significant at .05 level). Only two members of the therapy group were brought before the behavior court during this time in comparison to six members of the placebo group and eight members of the control group. No difference was found between Negroes and Caucasians.

Thorne, F.C. Counseling and psychotherapy with mental defectives. Amer. J. Ment. Def., 1948, 52, 263-271.

Contrary to established attitudes in the child guidance movement, counseling and psychotherapy with mental defectives is both possible and profitable. This paper is a report of the application of a comprehensive guidance program at the Brandon State School during a two year period. During the biennium, a total of 68 children, including 30 males and 38 females were exposed to counseling or group psychotherapy. The cases were selected on the basis of serious conduct disorders which were not susceptible to improvement under normal administrative routines. Basic objectives for counseling were: 1) accepting of self as a worthy person; 2) permitting expression and clarification of emotional reactions; 3) teaching methods of tolerating frustration and achieving emotional control; 4) outlining standards of conduct according to ability; 5) building up self-confidence and respect. A rough estimate was made of the results of counseling in each individual case by evaluating the status of each child at the end of the biennium to determine whether improvement in conduct took place. Forty-five or sixty-six percent of the cases were improved, sixteen or twenty-three percent unchanged and seven or ten percent were worse.

Tizard, J. The structure of a mental deficiency service. In: Oster, J. (ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

Four problems are discussed that have a bearing upon the kinds of services provided for the mentally subnormal; 1) true prevalence of mental subnormality, 2) the administrative prevalence of mental subnormality, 3) residential care, 4) empirical studies of social institutions and services. The author finds no evidence to believe prevalence of mental abnormality is increasing, suggests that a common service could take care of both residential and day needs of the total population living in a certain area, discusses two alternative patterns of care(system of large units or one of small units), and makes a plea for an experimental approach to the evaluation of services.

Wallin, J.E.W. Sheltered workshops for older adolescent and adult mental retardates, Part I. Train. Sch. Bull., 1960, 56, 111-121.

A brief historical account of the development of sheltered workshops leading up to those for mentally retarded individuals. The rest of the article lists and explains eight objectives of a sheltered workshop. A workshop should be organized to develop vocational skills, train individuals for competitive employment, offer social and recreational contacts, develop communication skills, develop the three R's, overcome personality problems where possible, provide counseling and guidance, and provide job-placement and supportive follow-ups.

Wallin, J.E.W. Sheltered workshops for older adolescents and adult mental retardates, Part II. Train. Sch. Bull., 1960, 57, 24-30.

Eight suggestions are given for implementation the objectives listed in Part I. Applicants should be screened; a periodic evaluation of the work program for each trainee should be made; a reasonable amount of time should be spent overcoming scholastic, intellectual and occupational handicaps; a continuous program of socio-occupational preparation should be provided; skills in complex jobs can be fostered by breaking them into simple steps; if training and work programs are in the same center, they should be separate to avoid interference with each other; get a good location, the workshop should be well located to expedite incoming and outgoing shipments and near transportation facilities for trainees and employees. The conduct of the workshop should be in compliance with strict business practice. There is a wide range of jobs for which the mentally retarded can be trained; and by receiving training many of them can become productive members of the community.

Wolfensberger, Wolf. Teaching and training of the retarded in European countries. Ment. Retard., 1964, 2(6), 331-337.

In a number of sheltered workshops in Europe the severely retarded operate dangerous equipment, perform complex tasks and produce at respectable levels of output. One such group of 20 trainees had a mean I.Q. of 53, with a range of 37-75, and mental ages of 5.6 to 11.2 years. Four phenomena may account for these trainees' success: 1) a sequence of programs which emphasized obedience and hard work; 2) concentration on jobs which had industrial assembly characteristics; 3) the personnel working with the trainees were almost all craftsmen or had industrial backgrounds; 4) supervisors were most ingenious in inventing and making production aids and other means which brought a task within the scope of the retardates ability. European retardates seem to be better behaved which may be due to 1) more stress in the home upon obedience, conformity, and neatness; 2) continuity of care and/or relationships; 3) emphasis on positive reinforcement; 4) amount of positive reinforcement through paying retardates for their work; 5) mode of reinforcement delivery with the combining of feed-back and accessible counseling; and 6) degree of supervision is intensive so that desirable behavior could be praised more often. An interaction of continuous services, management methods, and a healthy attitude of the personnel have minimized behavior problems in retardates in the programs observed.

Woods Schools, Langhorne, Pa. Vocational training and rehabilitation of exceptional children; proceedings of the 1957 Spring Conference of the Woods Schools. Chicago, Ill., 144.

Vocational rehabilitation programs must begin to anticipate the abolition of certain jobs now held by the mentally retarded and search for possible new openings in harmony with capabilities. It must be sensitive to changes occurring in our social structure and particular changes in commerce and industry. Finally, it must look into the future in its plans for training and placement, since present training means placement in the future.

APPENDIX

MISCELLANEOUS PROGRAM SUMMARIES AND REPORTS

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AUTHOR INDEX

Abel, T.M. 19, 27
Adams, F. 97
Adamson, W.C. 1
Ainsworth, M.H. 20, 27
Ajirogi, H.H. 147
Allee, Ruth 85
Allen, Mary L. 63, 79
Anderson, V.V. 19
Appell, M.J. 37, 147
Arbitman, H.D. 63
Arkansas Children's Colony 147
Arnholter, E. 139
Association for the Help of Retarded Children, Inc. 147
Astrachan, Myrtle 37
Avila, D.L. 63

Badham, J.N. 37
Baller, W.R. 19, 38
Barclay, A. 63
Barklind, K. 43
Barr, M.W. 1
Barrera, S.E. 81
Barret, A.M. 64, 69
Bartl, B. 131
Bartlett, C.J. 113
Barton, E.H. Jr. 147
Bassett, Dorothy M. 20
Baumeister, A.A. 64, 113
Beard, R.J. 131
Beck, S.J. 64
Beckham, J.J. 65
Begg, T.L. 110
Benton, A.L. 65, 66
Bensberg, Gerard J. 89
Bergman, J. 131
Berman, I. 66
Bethel, J. 131
Bierman, A. 67, 147
Bigelow, Elizabeth 20
Bijou, S.W. 20, 67, 113
Blackman, L.S. 1, 68, 95
Blodgett, Harriet E. 68
Bobby Dodd Workshop 68
Bobroff, A. 38
Bogatz, B.E. 139
Bogod, E. 39
Bolduc, T.E. 95
Boly, L. 147
Bordua, D.J. 114
Bovet, L. 2
Bower, W.C. 114
Boyd, W.N. 147
Bradley, C. 39
Brandon, M.W. 39
Brauer, I. 105
Braum, T.D. 147
Briggs, Frances B. 147
Bronner, A.F. 114
Brower, D. 68
Brower, Judith F. 68
Brown, L.N. 55
Brown, S.J. 39, 59, 61
Buck, E. 27
Budoff, M. 69
Burdett, A.D. 2
Burdette, Arthur 86
Burg, Billie W. 69
Burk, J.L. 95
Burns, P.C. 148
Burr, Emily T. 2, 33, 69, 70
Butler, Edgar W. 83
Butler, F.O. 20, 21, 40
Byrne, May E. 21

Calhoun, R.E. 21
Calvert, S.S. 150
Camp, B.M. 21
Caniff, C.E. 148
Cantor, G.N. 71
Carelton, F.O. Jr. 71
Carpenter, M.S. 21
Carriker, W.R. 40, 148
Carson, E.O. 40
Cassell, J. 147
Cassidy, Viola M. 40
Cate, H. 2
Cecenia, E.F. 139
Chandler, C.S. 41, 96
Channing, Alice 22
Charles, D.C. 38, 41, 71, 96
Chase, A. 27
Clampitt, R.R. 71
Claridge, G.S. 72, 105
Clarke, A.D.B. 2, 3, 41, 72, 96, 132
Clarke, A.M. 3, 96

Clarke, Mary Jane I. 3
Clelard, Charles C. 82
Coakley, Frances 22
Cobb, H.V. 72
Coe, R.M. 41
Cohen, J.I. 42, 73, 97, 132, 148
Collman, R.D. 42
Cortazzo, A.D. 132
Cowdrey, K.M. 73
Cowen, E.L. 3, 97
Craft, M. 43
Crafts, L.W. 22
Crawford, J.M. 91
Cromwell, R.L. 73
Crump, W.A. 97
Cumberland-Salem Unit at Vineland 153
Cutts, R.A. 73, 90

Davies, S.P. 3, 4
Dayan, M. 74
Deardon, H.M. 4
Delp, H.A. 74, 148
DeMartino, Manfred F. 91
Deno, Evelyn 43
Deprospo, C. 4, 43
Dicarlo, L.M. 43
DiMichael, S.G. 45, 98, 132
Dinger, J.C. 44
Dingham, J.F. 59
Dingman, Harvey F. 83
Division of Vocational
Rehabilitation 148
Doedon, N. 149
Doll, E.A. 5, 10, 74, 98
Domino, G. 77
Dubrow, M. 5, 9, 133, 149, 150
Dunn, W.H. 44
Durling, D. 74
Dybwad, G. 5, 6, 98

Earl, C.J.C. 75, 115
Eaton, H. 149
Ecob, K.G. 4
Elart, A.J. 149
Ellwood, Paul Jr. 148
Engel, Anna M. 6
England, G.W. 6
Engle, T.S. 78
Einig, K.G. 100
Eisele, J. 64
Erdman, R.L. 75
Eyman, R.K. 59

Fairbanks, S.R. 22
Federation Employment and Guidance
Service 154
Felker, D.K. 149
Ferguson, R.G. 75
Ferguson, T. 23, 44
Fernald, W.E. 23
Fishell, K.N. 37, 147
Fisher, G.M. 108
Fiske, D.W. 116
Fitzpatrick, F.K. 45
Fleiss, H. 96
Foley, R.W. 23
Font, Marion 76
Foster, V.H. 23
Fraenkel, W.A. 6, 133
Francis, R.J. 76
Franks, C.M. 116
Franks, Violet 116
Frieberg, M. 28
Friedman, H.O. 149
Friedman, S.B. 133
Fry, L.M. 116
Fudell, S.E. 98

Gage, R.M. 45
Galazan, M.M. 149
Garret, J.F. 7
Garrison, R.K. 7
Gegenheimer, R. 2
Gellman, W. 76, 98, 99, 117, 133, 149
Geraldine, S. 20
Gesell, A. 99
Gibson, R. 7
Giliberty, F.R. 149
Gill, M.R. 91
Giraud-L'Herbault, G. 45
Glaser, N.M. 76, 117
Goddard, H.H. 24
Goldberg, I. 134
Goldman, E. 99
Goldman, Morton 97
Goldschmid, M.L. 77
Goldstein, H. 7, 77
Goodwill Industries of America 8, 134,
148, 152
Gootzeit, J.M. 149

Gordon, S. 99
Gorelick, J. 92, 128
Gorlow, L. 70, 77, 78, 100
Goulet, L.R. 63
Gragert, H.T. 135, 150
Graham, J.A.G. 100
Grant, J.R. 45
Greene, C.L. 24, 100
Greene, Elizabeth 24
Greenspan, E. 120
Grigg, A.E. 45
Guertin, W.H. 118
Gunzberg, H.C. 8, 46, 59, 77, 118, 150
Guralnick, D. 46
Gutherie, G.M. 70, 77, 78

Hall, M. 50
Hamilton, G. 25
Hamlett, Iona 78
Hanna, G.C. 25
Harms, Mary 46, 47
Harold, E.C. 47
Harris, Lucy 100
Harry, W.M. 97
Hartlage, L.C. 101
Hartzler, Ethel 47
Haskell, R.H. 47
Hastorf, A.H. 9
Hawkins W.F. 113
Hawver, D.A. 129
Heber, R.F. 101
Hegge, T.G. 25, 51
Henze, R. 43
Hiatt, M.S. 48
Hilliard, L.T. 48
Kinkle, V.R. 48
Hite, Theresa D. 150
Hobbs, Mary T. 101
Holderman, Beatrice 150
Hollinshead, M.T. 78
Holman, Portia 79
Holt, E.C. 150
Horne, Betty M. 79
Hornell, H. 35
Hoyle, J. 8
Hoyle, S. 101
Huber, W.G. 8
Humphreys, E.J. 19, 25
Hunt, Elina B. 48
Hunt, W.A. 48

Hyde, R.W. 102

Isaac, D.M. 95
Itkin, W. 105
Itoga, K. 48
Izutsu, S. 127

Jacobs, A. 9, 150
Jeffrey, A.M. 26
Jewel, Alice M. 26
Johnson, Betsey S. 28, 49, 79
Johnson, H.A. 26
Johnson, S.W. 150
Jones, E.E. 9

Kahn, Harris 68, 86, 95, 122
Kaluger, G. 135
Kam, Violet Z. 80, 150
Katz, E. 49, 80
Kaufman, M.E. 102
Keeler, Kathleen F. 49
Kelley, H.H. 9
Kellogg, Roberta M. 26
Kelly, D.M. 81
Kennedy, R.J.R. 49, 50
Kephart, N.C. 27, 81, 102, 109
Kern, R.V. 9
Kerr, Agnes W. 44
Keys, N. 27
Keyt, Nellie L. 85
Kinder, E.F. 27
Kingsley, L. 102
Kinney, Carolyn 103
Kirman, B. 10
Kitsap Sheltered Workshop, Inc. 154
Klabber, M.M. 119
Kokaska, C. 135
Kolstoe, O.P. 103, 119, 120
Kounin, J.S. 81
Kradel, J. 151
Krahl, L.A. 136
Krantz, G. 43
Kratter, F.E. 10
Krischef, C.H. 50, 103
Kruger, D.H. 104

Ladas, P.G. 120

LaFave, H.C. 95
Lafon, R. 45
Laing, J.K. 50
Lambert, J. 50
Larson, K.H. 82
Lauber, Ellyn G. 51
Lavis, L.W. 131
Lawrence, E.S. 10
Lawson, J.R. 63
Lebanon County Workshop, Inc. 147
Lee, J.L. 51
Levy, S. 51
Levine, M. 150
Liebowitz, J. 69
Linde, T. F. 82, 136
Lipman, R.S. 82, 97
Little, A.N. 28
Lofquist, L.H. 10
Long Beach Retarded Children's Foundation, Inc. 150
Longwell, S. 20
Loos, F.M. 51
Lott, Josina 151
Louisiana Youth Commission 51
Lurie, L.A. 28
Lytle, V. 28

McAffee, R.O. 82
McAlpine, Jean D. 29
McCandless, B.R. 67
McGavern, Musetta 66
McGee, E. 57, 58
McGrath, Kay 96
McKeon, R.M. 28, 52, 53
McPhee, W.M. 53
McPheron, M.L. 151
McPherson, Marion W. 83
Maceachern, D.G. 124
Mackay, G.W. 60
MacMillan, M.B. 52
MacPherson, G.E. 29
Madison, H.L. 104
Magaw, D.C. 86, 104
Magleby, F.L. 53
Magnifico, L.X. 10
Marchand, J.G. 104
Marra, J. 151
Mathis, B.C. 148
Matthews, M. 29
Maxwell, A.E. 85
Meadow, L. 120
Mercer, Jane 83
Merlet, L. 83
Merril, M.Q. 120
Meyerson, L.M. 11
Michael, J.L. 11
Michal-Smith H. I. 84, 105
Millazzo, T. 56
Miller, E.L. 38, 53
Miller, M.R. 151
Minnesota Inter-Agency Committee on Mental Retardation 153
Missouri Department of Education 152
Moar, A.H. 84
Moed, M.G. 136
Molish, H.B. 84
Monaghham, J.F. 151
Morelli, D. 97
Morris, J.V. 53
Mt. Diablo Therapy Center 151
Mower, O.H. 11
Muench, G.A. 29
Mullen, Frances 54, 105
Muller, M.W. 121
Murphy, F.J. 151
Mursell, G.R. 11
Muskin, C.L. 137, 151

Nathan, J. 27
National Association for Retarded Children 11
Neff, W. 54, 99, 105
Nesterer, Inez 29
Newlyn, D. 42
New Jersey Rehabilitation Commission 148, 152
Nichalson, W.R. 54
Niebling, L.H. 151
Niehm, B.F. 151
Nussear, Helen 152

Oblinger, Barbara 90
O'Brien, Margaret 54
Occupational Rehabilitation, Inc. 149
Occupational Services, Inc. 152
Occupational Training Center 152
Occupational Workshop, Inc. 152
O'Connor, H. 91
O'Connor, N. 5, 10, 12, 15, 55, 72, 85, 91, 99, 121, 122
Ogdon, D. 85

Oklahoma Rehabilitation Service 148
Orange Grove Training Center 15
Ordahl, G. 30, 85
Osgood, C.E.11
Oster, J. 12

Padden M.E. 30
Park, R. 131
Parson, R.L. 152
Patrick, D. 152
Patterson, C.H. 123
Patterson, M. 86, 152
Patterson, R.G. 106
Patterson Sheltered Workshop 153
Peck, J.R. 138
Peckham, R. 55
Pereira, O. 12
Pero, J.E. 106
Peters, R.B. 106
Peterson, L. 56
Phelps, H.R. 40, 56
Phelps, W.R. 107
Philadelphia Work-Training Center 148
Phillips, W.M. 123
Pickrel, E.W. 123
Pinkard, D.M.C. 123, 138
Polatsek, I. 139
Pomp, H.C. 148
Poppleson, J.A. 86
Porter, R.B. 56
Porteus, S.D. 124
Potter, H. 86
Potts, Jane H. 56
Powdermaker, Florence 30
Pratt, R. 131
President's Committee on Employment of Handicapped 12
Pritchard, Miriam 87

Racine, H. 50
Rarick, G.L. 76
Rasmussen, H. 87
Rautman, A.L. 107
Raymond, Alice 30
Raymond, G. S. 13
Reichenberg, W. 31
Reiman, S. 96
Relos, R. 64
Reynolds, M.C. 57, 124
Rhone, Doric E. 66
Ricker, L.H. 138
Ringelheim, D. 139
Roberts, A.D. 125
Rochester Rehabilitation Center, Inc. 152
Rockower, Leona D.W. 13
Rogers, O.P. 153
Rosenblatt, B. 87
Rosewood State Hospital 154
Rosenzweig, L.E. 4, 13
Rossy, C.S. 13
Rotberg, J. 139
Rudolf, G.D.M. 107
Rusalem, H. 73

Saenger, G. 57
Sadnavitch, J.M. 88
Sarason, E.K. 89
Sarason, S.B. 88, 89, 93
Satter, G. 57, 58
Schaffer, A.J. 41
Schlan, L. 28
Schmidt, Bernadine 31, 58
Schmidt, P. 139, 153
Schumaker, F.A. 140
Sechrest, L. 141
Seidenfeld, M.A. 108
Seward, Jean 153
Shainman, L. 4
Sharkey, F.E. 140
Sharp, A.R. 63
Shaw, C.H. 58
Shaw, M.E. 89
Shaw, W.H. 153
Shawn, B. 140
Shimberg, M. 31
Shontz, F.C. 14
Shotwell, Anna M. 108, 141
Shumaker, A.T. 153
Sievers, Dorothy J. 100
Silverstein, A.B. 90, 108
Simasek, J. 153
Slawson, W. 150
Sletved, H.V. 12
Sloan, W. 73, 90, 126
Smith, D.W. 153
Smith, G.M. 153
Smith, J.A. 100
Smith, L.L. 56

Snow, C.H. 153
Snyder, L.C. 109, 126, 141
Soforenko, A.Z. 8
Soloff, A. 99
Solomon, P. 87, 90
Spangler, D.P. 127
Speyer, N. 108
Staats, A.M. 11
Stabler, Elizabeth 154
Stacey, C.L. 71, 91
Stanley, R.J. 59
Strauss, A.A. 47, 107
Stebbins, Inez 31
Steckel, M.L. 31
Stephens, W. Beth 126
Stevenson, H.W. 109
Stewart, Elizabeth 39, 61
Stockey, M.R. 20
Stone, C.A. 31
Storrs, H.C. 32
Strickland, C.G. 59
Stull, E. 14
Stunkard, C.L. 57
Suber, R.B. 154
Sullivan, S.C. 104
Sutherland, E.H. 32
Sweeney, S.R. 154
Switzer, A. 114
Syden, N. 15

Tanaka, M. 48
Tarjan, G. 59, 111
Taylor, J.B. 127, 154
Taylor, Margretta 32
Teska, P.T. 110
Texas Education Agency 152
Thackery, M.G. 53
Thibault, J.W. 9
Thomas, C.W. 127
Thomas, H.P. 33
Thorne, F.C. 141
Tisdall, W.J. 60
Tizard, J. 15, 51, 91, 99, 110,
   121, 122, 142
Tobias, J. 92, 128
Tong, J.E. 60
Town, Clara H. 33
Townsell, J.D. 140
Trachtman, A. 16
Tulane University School of
   Social Work 51

Unger, E.W. 33, 70
Urich, D.A. 92
Usdane, W.M. 9
U.S. Department of Health, Education
   and Welfare 16

Voelker, P.H. 51, 92, 129
Vocational Rehabilitation Administration
   11, 17, 60
Vineland Training School 151
Von Bulow, H. 20

Wagner, E.E. 129
Waite, T.E. 21
Wallace, G.L. 33, 34
Wallin, J.E. W. 17, 34, 142
Walton, D. 110
Wardell, W.K. 111
Warner, M. 139
Warren, S.L. 17
Weaver, T.L. 60
Wehrmeijer, J.W. 111
Weingold, J.T. 9, 150
Weisman, G. 34
Werner, H. 93
Whitcomb, Marion A. 35
Whitney, A. 35
Williams, C.M. 37, 147
Wilsnack, H. 154
Windle, C.D. 39, 61, 130
Winifred, C. Amelia 35
Winograd, K. 154
Winthrop, H. 93
Wittenborn, J.R. 93
Wittenson, C.L. 48
Woalley, Helen 35
Wolfensberger, W. 94, 143
Wolfson, I.N. 45, 61
Woods Schools 18
Wright, C.H. 58, 85
Wright, M.E. 18
Wyers, R.E. 111

Yonge, K. 85
York, P.A. 18
Young, M.A. 94

Ziegler, R. 97

Shotwell, Anna M. Effectiveness of institutional training of high-grade mentally defective girls. Amer. J. Ment. Def., 1949, 53, 432.

A study of the effectiveness of institutional training of 31 high-grade mentally defective girls over a three year period. Results showed that 42% of the subjects were rehabilitated. The duration of institutionalization for the rehabilitated subjects was from nine months to four years, five months. No control measures were reported.

Snyder, R. and Sechrest, L. An experimental study of directive group therapy with defective delinquents. Amer. J. Ment. Def., 1959, 64, 117-123.

A study of the effects of directive group therapy with institutionalized mentally retarded delinquent males was carried out at the Huntington, Pennsylvania Institution for Defective Delinquents. A therapy group, a placebo group, and a control group consisting of 9 Caucasians and 9 Negros each were used. After 13 weeks(during which the therapy group received 13 hours of therapy and the placebo group had 13 hours of meetings, all the subjects' records were checked. It was found that the therapy group had received more positive comments on a rating filled out by the ward charges than did the placebo or control groups(significant at .05 level). Only two members of the therapy group were brought before the behavior court during this time in comparison to six members of the placebo group and eight members of the control group. No difference was found between Negroes and Caucasians.

Thorne, F.C. Counseling and psychotherapy with mental defectives. Amer. J. Ment. Def., 1948, 52, 263-271.

Contrary to established attitudes in the child guidance movement, counseling and psychotherapy with mental defectives is both possible and profitable. This paper is a report of the application of a comprehensive guidance program at the Brandon State School during a two year period. During the biennium, a total of 68 children, including 30 males and 38 females were exposed to counseling or group psychotherapy. The cases were selected on the basis of serious conduct disorders which were not susceptible to improvement under normal administrative routines. Basic objectives for counseling were: 1) accepting of self as a worthy person; 2) permitting expression and clarification of emotional reactions; 3) teaching methods of tolerating frustration and achieving emotional control; 4) outlining standards of conduct according to ability; 5) building up self-confidence and respect. A rough estimate was made of the results of counseling in each individual case by evaluating the status of each child at the end of the biennium to determine whether improvement in conduct took place. Forty-five or sixty-six percent of the cases were improved, sixteen or twenty-three percent unchanged and seven or ten percent were worse.

Tizard, J. The structure of a mental deficiency service. In: Oster, J. (ed) International Copenhagen Congress on the Scientific Study of Mental Retardation. Copenhagen, Denmark, 1964.

Four problems are discussed that have a bearing upon the kinds of services provided for the mentally subnormal; 1) true prevalence of mental subnormality, 2) the administrative prevalence of mental subnormality, 3) residential care, 4) empirical studies of social institutions and services. The author finds no evidence to believe prevalence of mental abnormality is increasing, suggests that a common service could take care of both residential and day needs of the total population living in a certain area, discusses two alternative patterns of care(system of large units or one of small units), and makes a plea for an experimental approach to the evaluation of services.

Wallin, J.E.W. Sheltered workshops for older adolescent and adult mental retardates, Part I. Train. Sch. Bull., 1960, 56, 111-121.

A brief historical account of the development of sheltered workshops leading up to those for mentally retarded individuals. The rest of the article lists and explains eight objectives of a sheltered workshop. A workshop should be organized to develop vocational skills, train individuals for competitive employment, offer social and recreational contacts, develop communication skills, develop the three R's, overcome personality problems where possible, provide counseling and guidance, and provide job-placement and supportive follow-ups.

Wallin, J.E.W. Sheltered workshops for older adolescents and adult mental retardates, Part II. Train. Sch. Bull., 1960, 57, 24-30.

Eight suggestions are given for implementation the objectives listed in Part I. Applicants should be screened; a periodic evaluation of the work program for each trainee should be made; a reasonable amount of time should be spent overcoming scholastic, intellectual and occupational handicaps; a continuous program of socio-occupational preparation should be provided; skills in complex jobs can be fostered by breaking them into simple steps; if training and work programs are in the same center, they should be separate to avoid interference with each other; get a good location, the workshop should be well located to expedite incoming and outgoing shipments and near transportation facilities for trainees and employees. The conduct of the workshop should be in compliance with strict business practice. There is a wide range of jobs for which the mentally retarded can be trained; and by receiving training many of them can become productive members of the community.

Wolfensberger, Wolf. Teaching and training of the retarded in European countries. Ment. Retard., 1964, 2(6), 331-337.

In a number of sheltered workshops in Europe the severely retarded operate dangerous equipment, perform complex tasks and produce at respectable levels of output. One such group of 20 trainees had a mean I.Q. of 53, with a range of 37-75, and mental ages of 5.6 to 11.2 years. Four phenomena may account for these trainees' success: 1) a sequence of programs which emphasized obedience and hard work; 2) concentration on jobs which had industrial assembly characteristics; 3) the personnel working with the trainees were almost all craftsmen or had industrial backgrounds; 4) supervisors were most ingenious in inventing and making production aids and other means which brought a task within the scope of the retardates ability. European retardates seem to be better behaved which may be due to 1) more stress in the home upon obedience, conformity, and neatness; 2) continuity of care and/or relationships; 3) emphasis on positive reinforcement; 4) amount of positive reinforcement through paying retardates for their work; 5) mode of reinforcement delivery with the combining of feed-back and accessible counseling; and 6) degree of supervision is intensive so that desirable behavior could be praised more often. An interaction of continuous services, management methods, and a healthy attitude of the personnel have minimized behavior problems in retardates in the programs observed.

Woods Schools, Langhorne, Pa. Vocational training and rehabilitation of exceptional children; proceedings of the 1957 Spring Conference of the Woods Schools. Chicago, Ill., 144.

Vocational rehabilitation programs must begin to anticipate the abolition of certain jobs now held by the mentally retarded and search for possible new openings in harmony with capabilities. It must be sensitive to changes occurring in our social structure and particular changes in commerce and industry. Finally, it must look into the future in its plans for training and placement, since present training means placement in the future.

APPENDIX

MISCELLANEOUS PROGRAM SUMMARIES AND REPORTS

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Carriker, W.R., Project Director. A Comparison of Post-school Adjustment of Regular and Special Class Retarded Individuals served in Lincoln and Omaha, Nebraska, Public School. Nebraska State Dept. of Ed., Omaha, Nebr., 1957.

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AUTHOR INDEX

Abel, T.M. 19, 27
Adams, F. 97
Adamson, W.C. 1
Ainsworth, M.H. 20, 27
Ajirogi, H.H. 147
Allee, Ruth 85
Allen, Mary L. 63, 79
Anderson, V.V. 19
Appell, M.J. 37, 147
Arbitman, H.D. 63
Arkansas Children's Colony 147
Arnholter, E. 139
Association for the Help of Retarded Children, Inc. 147
Astrachan, Myrtle 37
Avila, D.L. 63

Badham, J.N. 37
Baller, W.R. 19, 38
Barclay, A. 63
Barklind, K. 43
Barr, M.W. 1
Barrera, S.E. 81
Barret, A.M. 64, 69
Bartl, B. 131
Bartlett, C.J. 113
Barton, E.H. Jr. 147
Bassett, Dorothy M. 20
Baumeister, A.A. 64, 113
Beard, R.J. 131
Beck, S.J. 64
Beckham, J.J. 65
Begg, T.L. 110
Benton, A.L. 65, 66
Bensberg, Gerard J. 89
Bergman, J. 131
Berman, I. 66
Bethel, J. 131
Bierman, A. 67, 147
Bigelow, Elizabeth 20
Bijou, S.W. 20, 67, 113
Blackman, L.S. 1, 68, 95
Blodgett, Harriet E. 68
Bobby Dodd Workshop 68
Bobroff, A. 38
Bogatz, B.E. 139
Bogod, E. 39
Bolduc, T.E. 95
Boly, L. 147
Bordua, D.J. 114
Bovet, L. 2
Bower, W.C. 114
Boyd, W.N. 147
Bradley, C. 39
Brandon, M.W. 39
Brauer, I. 105
Braum, T.D. 147
Briggs, Frances B. 147
Bronner, A.F. 114
Brower, D. 68
Brower, Judith F. 68
Brown, L.N. 55
Brown, S.J. 39, 59, 61
Buck, E. 27
Budoff, M. 69
Burdett, A.D. 2
Burdette, Arthur 86
Burg, Billie W. 69
Burk, J.L. 95
Burns, P.C. 148
Burr, Emily T. 2, 33, 69, 70
Butler, Edgar W. 83
Butler, F.O. 20, 21, 40
Byrne, May E. 21

Calhoun, R.E. 21
Calvert, S.S. 150
Camp, B.M. 21
Caniff, C.E. 148
Cantor, G.N. 71
Carelton, F.O. Jr. 71
Carpenter, M.S. 21
Carriker, W.R. 40, 148
Carson, E.O. 40
Cassell, J. 147
Cassidy, Viola M. 40
Cate, H. 2
Cecenia, E.F. 139
Chandler, C.S. 41, 96
Channing, Alice 22
Charles, D.C. 38, 41, 71, 96
Chase, A. 27
Clampitt, R.R. 71
Claridge, G.S. 72, 105
Clarke, A.D.B. 2, 3, 41, 72, 96, 132
Clarke, A.M. 3, 96

Clarke, Mary Jane I. 3
Clelard, Charles C. 82
Coakley, Frances 22
Cobb, H.V. 72
Coe, R.M. 41
Cohen, J.I. 42, 73, 97, 132, 148
Collman, R.D. 42
Cortazzo, A.D. 132
Cowdrey, K.M. 73
Cowen, E.L. 3, 97
Craft, M. 43
Crafts, L.W. 22
Crawford, J.M. 91
Cromwell, R.L. 73
Crump, W.A. 97
Cumberland-Salem Unit at Vineland 153
Cutts, R.A. 73, 90

Davies, S.P. 3, 4
Dayan, M. 74
Deardon, H.M. 4
Delp, H.A. 74, 148
DeMartino, Manfred F. 91
Deno, Evelyn 43
Deprospo, C. 4, 43
Dicarlo, L.M. 43
DiMichael, S.G. 45, 98, 132
Dinger, J.C. 44
Dingham, J.F. 59
Dingman, Harvey F. 83
Division of Vocational Rehabilitation 148
Doedon, N. 149
Doll, E.A. 5, 10, 74, 98
Domino, G. 77
Dubrow, M. 5, 9, 133, 149, 150
Dunn, W.H. 44
Durling, D. 74
Dybwad, G. 5, 6, 98

Earl, C.J.C. 75, 115
Eaton, H. 149
Ecob, K.G. 4
Elart, A.J. 149
Ellwood, Paul Jr. 148
Engel, Anna M. 6
England, G.W. 6
Engle, T.S. 78
Einig, K.G. 100
Eisele, J. 64

Erdman, R.L. 75
Eyman, R.K. 59

Fairbanks, S.R. 22
Federation Employment and Guidance Service 154
Felker, D.K. 149
Ferguson, R.G. 75
Ferguson, T. 23, 44
Fernald, W.E. 23
Fishell, K.N. 37, 147
Fisher, G.M. 108
Fiske, D.W. 116
Fitzpatrick, F.K. 45
Fleiss, H. 96
Foley, R.W. 23
Font, Marion 76
Foster, V.H. 23
Fraenkel, W.A. 6, 133
Francis, R.J. 76
Franks, C.M. 116
Franks, Violet 116
Frieberg, M. 28
Friedman, H.O. 149
Friedman, S.B. 133
Fry, L.M. 116
Fudell, S.E. 98

Gage, R.M. 45
Galazan, M.M. 149
Garret, J.F. 7
Garrison, R.K. 7
Gegenheimer, R. 2
Gellman, W. 76, 98, 99, 117, 133, 149
Geraldine, S. 20
Gesell, A. 99
Gibson, R. 7
Giliberty, F.R. 149
Gill, M.R. 91
Giraud-L'Herbault, G. 45
Glaser, N.M. 76, 117
Goddard, H.H. 24
Goldberg, I. 134
Goldman, E. 99
Goldman, Morton 97
Goldschmid, M.L. 77
Goldstein, H. 7, 77
Goodwill Industries of America 8, 134, 148, 152
Gootzeit, J.M. 149

Gordon, S. 99
Gorelick, J. 92, 128
Gorlow, L. 70, 77, 78, 100
Goulet, L.R. 63
Gragert, H.T. 135, 150
Graham, J.A.G. 100
Grant, J.R. 45
Greene, C.L. 24, 100
Greene, Elizabeth 24
Greenspan, E. 120
Grigg, A.E. 45
Guertin, W.H. 118
Gunzberg, H.C. 8, 46, 59, 77, 118, 150
Guralnick, D. 46
Gutherie, G.M. 70, 77, 78

Hall, M. 50
Hamilton, G. 25
Hamlett, Iona 78
Hanna, G.C. 25
Harms, Mary 46, 47
Harold, E.C. 47
Harris, Lucy 100
Harry, W.M. 97
Hartlage, L.C. 101
Hartzler, Ethel 47
Haskell, R.H. 47
Hastorf, A.H. 9
Hawkins W.F. 113
Hawver, D.A. 129
Heber, R.F. 101
Hegge, T.G. 25, 51
Henze, R. 43
Hiatt, M.S. 48
Hilliard, L.T. 48
Kinkle, V.R. 48
Hite, Theresa D. 150
Hobbs, Mary T. 101
Holderman, Beatrice 150
Hollinshead, M.T. 78
Holman, Portia 79
Holt, E.C. 150
Horne, Betty M. 79
Hornell, H. 35
Hoyle, J. 8
Hoyle, S. 101
Huber, W.G. 8
Humphreys, E.J. 19, 25
Hunt, Elina B. 48
Hunt, W.A. 48
Hyde, R.W. 102

Isaac, D.M. 95
Itkin, W. 105
Itoga, K. 48
Izutsu, S. 127

Jacobs, A. 9, 150
Jeffrey, A.M. 26
Jewel, Alice M. 26
Johnson, Betsey S. 28, 49, 79
Johnson, H.A. 26
Johnson, S.W. 150
Jones, E.E. 9

Kahn, Harris 68, 86, 95, 122
Kaluger, G. 135
Kam, Violet Z. 80, 150
Katz, E. 49, 80
Kaufman, M.E. 102
Keeler, Kathleen F. 49
Kelley, H.H. 9
Kellogg, Roberta M. 26
Kelly, D.M. 81
Kennedy, R.J.R. 49, 50
Kephart, N.C. 27, 81, 102, 109
Kern, R.V. 9
Kerr, Agnes W. 44
Keys, N. 27
Keyt, Nellie L. 85
Kinder, E.F. 27
Kingsley, L. 102
Kinney, Carolyn 103
Kirman, B. 10
Kitsap Sheltered Workshop, Inc. 154
Klabber, M.M. 119
Kokaska, C. 135
Kolstoe, O.P. 103, 119, 120
Kounin, J.S. 81
Kradel, J. 151
Krahl, L.A. 136
Krantz, G. 43
Kratter, F.E. 10
Krischef, C.H. 50, 103
Kruger, D.H. 104

Ladas, P.G. 120

LaFave, H.C. 95
Lafon, R. 45
Laing, J.K. 50
Lambert, J. 50
Larson, K.H. 82
Lauber, Ellyn G. 51
Lavis, L.W. 131
Lawrence, E.S. 10
Lawson, J.R. 63
Lebanon County Workshop, Inc. 147
Lee, J.L. 51
Levy, S. 51
Levine, M. 150
Liebowitz, J. 69
Linde, T. F. 82, 136
Lipman, R.S. 82, 97
Little, A.N. 28
Lofquist, L.H. 10
Long Beach Retarded Children's Foundation, Inc. 150
Longwell, S. 20
Loos, F.M. 51
Lott, Josina 151
Louisiana Youth Commission 51
Lurie, L.A. 28
Lytle, V. 28

McAffee, R.O. 82
McAlpine, Jean D. 29
McCandless, B.R. 67
McGavern, Musetta 66
McGee, E. 57, 58
McGrath, Kay 96
McKeon, R.M. 28, 52, 53
McPhee, W.M. 53
McPheron, M.L. 151
McPherson, Marion W. 83
Maceachern, D.G. 124
Mackay, G.W. 60
MacMillan, M.B. 52
MacPherson, G.E. 29
Madison, H.L. 104
Magaw, D.C. 86, 104
Magleby, F.L. 53
Magnifico, L.X. 10
Marchand, J.G. 104
Marra, J. 151
Mathis, B.C. 148
Matthews, M. 29
Maxwell, A.E. 85
Meadow, L. 120

Mercer, Jane 83
Merlet, L. 83
Merril, M.Q. 120
Meyerson, L.M. 11
Michael, J.L. 11
Michal-Smith H. I. 84, 105
Millazzo, T. 56
Miller, E.L. 38, 53
Miller, M.R. 151
Minnesota Inter-Agency Committee on Mental Retardation 153
Missouri Department of Education 152
Moar, A.H. 84
Moed, M.G. 136
Molish, H.B. 84
Monaghham, J.F. 151
Morelli, D. 97
Morris, J.V. 53
Mt. Diablo Therapy Center 151
Mower, O.H. 11
Muench, G.A. 29
Mullen, Frances 54, 105
Muller, M.W. 121
Murphy, F.J. 151
Mursell, G.R. 11
Muskin, C.L. 137, 151

Nathan, J. 27
National Association for Retarded Children 11
Neff, W. 54, 99, 105
Nesterer, Inez 29
Newlyn, D. 42
New Jersey Rehabilitation Commission 148, 152
Nichalson, W.R. 54
Niebling, L.H. 151
Niehm, B.F. 151
Nussear, Helen 152

Oblinger, Barbara 90
O'Brien, Margaret 54
Occupational Rehabilitation, Inc. 149
Occupational Services, Inc. 152
Occupational Training Center 152
Occupational Workshop, Inc. 152
O'Connor, H. 91
O'Connor, N. 5, 10, 12, 15, 55, 72, 85, 91, 99, 121, 122
Ogdon, D. 85

Oklahoma Rehabilitation Service 148
Orange Grove Training Center 15
Ordahl, G. 30, 85
Osgood, C.E.11
Oster, J. 12

Padden M.E. 30
Park, R. 131
Parson, R.L. 152
Patrick, D. 152
Patterson, C.H. 123
Patterson, M. 86, 152
Patterson, R.G. 106
Patterson Sheltered Workshop 153
Peck, J.R. 138
Peckham, R. 55
Pereira, O. 12
Pero, J.E. 106
Peters, R.B. 106
Peterson, L. 56
Phelps, H.R. 40, 56
Phelps, W.R. 107
Philadelphia Work-Training Center 148
Phillips, W.M. 123
Pickrel, E.W. 123
Pinkard, D.M.C. 123, 138
Polatsek, I. 139
Pomp, H.C. 148
Poppleson, J.A. 86
Porter, R.B. 56
Porteus, S.D. 124
Potter, H. 86
Potts, Jane H. 56
Powdermaker, Florence 30
Pratt, R. 131
President's Committee on Employment of Handicapped 12
Pritchard, Miriam 87

Racine, H. 50
Rarick, G.L. 76
Rasmussen, H. 87
Rautman, A.L. 107
Raymond, Alice 30
Raymond, G. S. 13
Reichenberg, W. 31
Reiman, S. 96
Relos, R. 64
Reynolds, M.C. 57, 124
Rhone, Doric E. 66
Ricker, L.H. 138
Ringelheim, D. 139
Roberts, A.D. 125
Rochester Rehabilitation Center, Inc. 152
Rockower, Leona D.W. 13
Rogers, O.P. 153
Rosenblatt, B. 87
Rosewood State Hospital 154
Rosenzweig, L.E. 4, 13
Rossy, C.S. 13
Rotberg, J. 139
Rudolf, G.D.M. 107
Rusalem, H. 73

Saenger, G. 57
Sadnavitch, J.M. 88
Sarason, E.K. 89
Sarason, S.B. 88, 89, 93
Satter, G. 57, 58
Schaffer, A.J. 41
Schlan, L. 28
Schmidt, Bernadine 31, 58
Schmidt, P. 139, 153
Schumaker, F.A. 140
Sechrest, L. 141
Seidenfeld, M.A. 108
Seward, Jean 153
Shainman, L. 4
Sharkey, F.E. 140
Sharp, A.R. 63
Shaw, C.H. 58
Shaw, M.E. 89
Shaw, W.H. 153
Shawn, B. 140
Shimberg, M. 31
Shontz, F.C. 14
Shotwell, Anna M. 108, 141
Shumaker, A.T. 153
Sievers, Dorothy J. 100
Silverstein, A.B. 90, 108
Simasek, J. 153
Slawson, W. 150
Sletved, H.V. 12
Sloan, W. 73, 90, 126
Smith, D.W. 153
Smith, G.M. 153
Smith, J.A. 100
Smith, L.L. 56

Snow, C.H. 153
Snyder, L.C. 109, 126, 141
Soforenko, A.Z. 8
Soloff, A. 99
Solomon, P. 87, 90
Spangler, D.P. 127
Speyer, N. 108
Staats, A.M. 11
Stabler, Elizabeth 154
Stacey, C.L. 71, 91
Stanley, R.J. 59
Strauss, A.A. 47, 107
Stebbins, Inez 31
Steckel, M.L. 31
Stephens, W. Beth 126
Stevenson, H.W. 109
Stewart, Elizabeth 39, 61
Stockey, M.R. 20
Stone, C.A. 31
Storrs, H.C. 32
Strickland, C.G. 59
Stull, E. 14
Stunkard, C.L. 57
Suber, R.B. 154
Sullivan, S.C. 104
Sutherland, E.H. 32
Sweeney, S.R. 154
Switzer, A. 114
Syden, N. 15

Tanaka, M. 48
Tarjan, G. 59, 111
Taylor, J.B. 127, 154
Taylor, Margretta 32
Teska, P.T. 110
Texas Education Agency 152
Thackery, M.G. 53
Thibault, J.W. 9
Thomas, C.W. 127
Thomas, H.P. 33
Thorne, F.C. 141
Tisdall, W.J. 60
Tizard, J. 15, 51, 91, 99, 110, 121, 122, 142
Tobias, J. 92, 128
Tong, J.E. 60
Town, Clara H. 33
Townsell, J.D. 140
Trachtman, A. 16
Tulane University School of Social Work 51

Unger, E.W. 33, 70
Urich, D.A. 92
Usdane, W.M. 9
U.S. Department of Health, Education and Welfare 16

Voelker, P.H. 51, 92, 129
Vocational Rehabilitation Administration 11, 17, 60
Vineland Training School 151
Von Bulow, H. 20

Wagner,E.E. 129
Waite, T.E. 21
Wallace, G.L. 33, 34
Wallin, J.E. W. 17, 34, 142
Walton, D. 110
Wardell, W.K. 111
Warner, M. 139
Warren, S.L. 17
Weaver, T.L. 60
Wehrmeijer, J.W. 111
Weingold, J.T. 9, 150
Weisman, G. 34
Werner, H. 93
Whitcomb, Marion A. 35
Whitney, A. 35
Williams, C.M. 37, 147
Wilsnack, H. 154
Windle, C.D. 39, 61, 130
Winifred, C. Amelia 35
Winograd, K. 154
Winthrop, H. 93
Wittenborn, J.R. 93
Wittenson, C.L. 48
Woalley, Helen 35
Wolfensberger, W. 94, 143
Wolfson, I.N. 45, 61
Woods Schools 18
Wright, C.H. 58, 85
Wright, M.E. 18
Wyers, R.E. 111

Yonge, K. 85
York, P.A. 18
Young, M.A. 94

Ziegler, R. 97